National Bureau of Standards
Library, E-01 Admin. Bldg.
AUG 2 2 1968

NBS MONOGRAPH 108

Oscillator Strengths and Transition Probabilities for 3288 Lines of Fe I

U.S. DEPARTMENT OF COMMERCE

NATIONAL BUREAU OF STANDARDS

THE NATIONAL BUREAU OF STANDARDS

The National Bureau of Standards[1] provides measurement and technical information services essential to the efficiency and effectiveness of the work of the Nation's scientists and engineers. The Bureau serves also as a focal point in the Federal Government for assuring maximum application of the physical and engineering sciences to the advancement of technology in industry and commerce. To accomplish this mission, the Bureau is organized into three institutes covering broad program areas of research and services:

THE INSTITUTE FOR BASIC STANDARDS . . . provides the central basis within the United States for a complete and consistent system of physical measurements, coordinates that system with the measurement systems of other nations, and furnishes essential services leading to accurate and uniform physical measurements throughout the Nation's scientific community, industry, and commerce. This Institute comprises a series of divisions, each serving a classical subject matter area:

—Applied Mathematics—Electricity—Metrology—Mechanics—Heat—Atomic Physics—Physical Chemistry—Radiation Physics—Laboratory Astrophysics[2]—Radio Standards Laboratory,[2] which includes Radio Standards Physics and Radio Standards Engineering—Office of Standard Reference Data.

THE INSTITUTE FOR MATERIALS RESEARCH . . . conducts materials research and provides associated materials services including mainly reference materials and data on the properties of materials. Beyond its direct interest to the Nation's scientists and engineers, this Institute yields services which are essential to the advancement of technology in industry and commerce. This Institute is organized primarily by technical fields:

—Analytical Chemistry—Metallurgy—Reactor Radiations—Polymers—Inorganic Materials—Cryogenics[2]—Office of Standard Reference Materials.

THE INSTITUTE FOR APPLIED TECHNOLOGY . . . provides technical services to promote the use of available technology and to facilitate technological innovation in industry and government. The principal elements of this Institute are:

—Building Research—Electronic Instrumentation—Technical Analysis—Center for Computer Sciences and Technology—Textile and Apparel Technology Center—Office of Weights and Measures—Office of Engineering Standards Services—Office of Invention and Innovation—Office of Vehicle Systems Research—Clearinghouse for Federal Scientific and Technical Information[3]—Materials Evaluation Laboratory—NBS/GSA Testing Laboratory.

---

[1] Headquarters and Laboratories at Gaithersburg, Maryland, unless otherwise noted; mailing address Washington, D. C., 20234.

[2] Located at Boulder, Colorado, 80302.

[3] Located at 5285 Port Royal Road, Springfield, Virginia 22151.

UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS • A. V. Astin, *Director*

Oscillator Strengths and Transition Probabilities for 3288 Lines of Fe I

C. H. Corliss and J. L. Tech

Institute for Basic Standards
National Bureau of Standards
Washington, D.C. 20234

National Bureau of Standards Monograph 108

Issued March 1968

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price 45 cents

Contents

Page
1. Introduction 1
2. Discussion of the data 1
3. Results 2
4. Discussion 3
5. References 3
Table 1 4
Table 2 51

Oscillator Strengths and Transition Probabilities for 3288 Lines of Fe I (2100–9900Å)

C. H. Corliss and J. L. Tech

A homogeneous set of intensity-related data has been calculated for 3288 spectral lines of Fe I in the region from 2100 to 9900 angstroms. The quantities tabulated in the present monograph include log ($gf\lambda$), log (gf), gf, f, gA, and A. The data are presented on the absolute scale established in a previous work by Corliss and Bozman. In that work and the later extensions of it by Corliss and Warner, the calculation of gf-values included the application of an empirically determined normalization correction to the level populations, the normalization being given as a function of upper energy level for the transition. Since recent investigations do not support these excitations corrections in the case of Fe I and certain other spectra, the present tabulation incorporates a removal of that normalization function. This recalculation affects the values for all lines whose upper energy levels lie above 46000 cm^{-1} and should significantly improve the internal consistency of the present data.

Key Words: Fe I, iron, oscillator strengths, spectrum, spectrum of neutral iron, transition probabilities in Fe I.

1. Introduction

A detailed knowledge of the spectrum of neutral iron (Fe I) is of great importance in both laboratory spectroscopy and astrophysics. In the spectroscopy laboratory, attention has been traditionally devoted to the term analysis and to obtaining wavelengths of high accuracy to serve as international secondary standards. For most applications in plasma physics and astrophysics, on the other hand, reliable values for intensity-related quantities associated with the spectrum also become a primary concern. Such values are rendered necessary, for example, in the determination of iron abundances in stellar atmospheres or in the calculation of theoretical line profiles. The importance of iron in this connection is indicated by the large number of iron lines commonly found in stellar spectra. The solar spectrum, as an example, is dominated by five times as many lines arising from iron as from any other element.

The present authors, using the best existing data on oscillator strengths for lines of Fe I, have just completed a comprehensive calculation of mean radiative lifetimes for 408 energy levels of neutral iron. In a work of that kind, of course, it was essential that most of the lines in which the energy of the system is radiated be taken into account. Reasonable assurance to this effect has been provided by several recent investigations that now permit the compilation of a consistent set of gf-values for almost 3300 lines of Fe I in the region extending from 2100 to 9900 Å. In the course of work on lifetimes we prepared a comprehensive table of oscillator strengths and other measures of intensity for lines over this entire range. These values are distinguished from earlier presentations in that the new calculation of gf-values removes an empirically determined excitation correction that had been applied to earlier measured values. The need for removing this normalization function is indicated by several recent investigations, as described below. The result, it is hoped, is an extensive and, more importantly, consistent set of data for neutral iron. In view of the current interest in this spectrum and of the homogeneity and completeness of the tables, we have decided to publish them as an NBS Monograph. Moreover, this Monograph contains all the supporting material for our work on mean lifetimes published in the NBS Journal of Research [12].

2. Discussion of the data

The present tables are based largely on the material contained in two earlier compilations by Corliss and Warner [1, 2] the first covering the spectral region from 2084 to 4150 Å and the second the region from 4150 to 9900 Å. The data given in those two publications were derived partly from new measurements by Corliss and Warner, and partly from the critical evaluation of 19 sets of measurements previously published by other workers. The observations had been variously made in emission or absorption by use of furnaces, and in emission by use of arcs, sparks, or hollow cathodes. In the evaluation, the data for each line were summarized by stating a "best" value for the logarithm of the gf-value.

The calibration of the majority of the data reported in [1] and [2] was carried out by reference to the oscillator strengths for Fe I found in the monograph by Corliss and Bozman [3]. Since the appearance of that work five years ago, new absolute measurements of *f*-values for Fe I have been made by Byard [4], and by Huber and Tobey [5]. This new information permits a re-examination of three aspects of Corliss and Bozman's data on Fe I: (1) the intensity calibration as a function of wavelength; (2) the relative populations of high levels in neutral iron (the "normalization function"); and (3) the absolute scale.

The intensity calibration has been re-examined by plotting as a function of wavelength the ratio of values in two new sets of measurements against the CB values. The new measurements used are the relative values of Parchevskiĭ and Penkin by the hook method [6] in the range 2900 to 4500 Å, and the absolute values of Byard using a shock tube in the range 4600 to 6200 Å. The average of the four atomic beam determinations listed on p. 336 of [1] for the line at 3719.9 Å provided the scaling factor for putting the relative measurements of Parchevskiĭ and Penkin onto an absolute scale. The resulting plot, given in figure 1, shows no evidence of a significant error dependent upon wavelength. Moreover, this figure offers additional evidence, over the range shown, for the general correctness of the absolute scale established by Corliss and Bozman, as discussed in [1].

Huber and Tobey [5] have made the first absolute measurements of *f*-values in Fe I that extend to lines with upper levels above 55000 cm^{-1}. Their results would indicate that the aforementioned normalization function, which in [3] was applied without discrimination to all spectra, should not have been applied as an excitation correction in the case of Fe I.

The inapplicability of this excitation correction to the values for Fe I and certain other spectra has been confirmed on other grounds by a recent investigation of Warner and Cowley [7]. In view of this, all values to which the normalization function had previously been applied were revised for the present tables.

3. Results

All calculations were performed on a high-speed digital computer, the Univac 1108. The results, presented in table 1 and table 2, were set by photocomposition from the computer output and should therefore be free of typesetting errors. Quantities derived from those values of log (gf) that have been changed by the removal of the normalization function were calculated from unrounded values of log (gf). This causes, for example, minor discrepancies between columns 5 and 7 of Table 1 for those lines arising from levels above 46,000 cm^{-1}. The various columns of Table 1 present the following information:

Col. 1: the wavelength of the spectral line, in angstrom units. The third digit to the right of the decimal point is significant only for wavelengths less 4150 Å.

Col. 2: the lower and upper energy levels for the transition. The values are rounded to the nearest cm^{-1}.

Col. 3: the multiplet number as found in C. E. Moore's Multiplet Tables [10, 11].

Col. 4: the *J*-values of the lower and upper energy levels, respectively, as taken from Vol. II of *Atomic Energy Levels* [8] or from Kiess, Rubin, and Moore [9].

Col. 5: the "best" value for log(*gf*) as taken from references [1] and [2]. In a few cases in [1] no "best" value could be safely derived. For our present table we have in some of these cases listed that value considered by us most likely to be correct. We have also

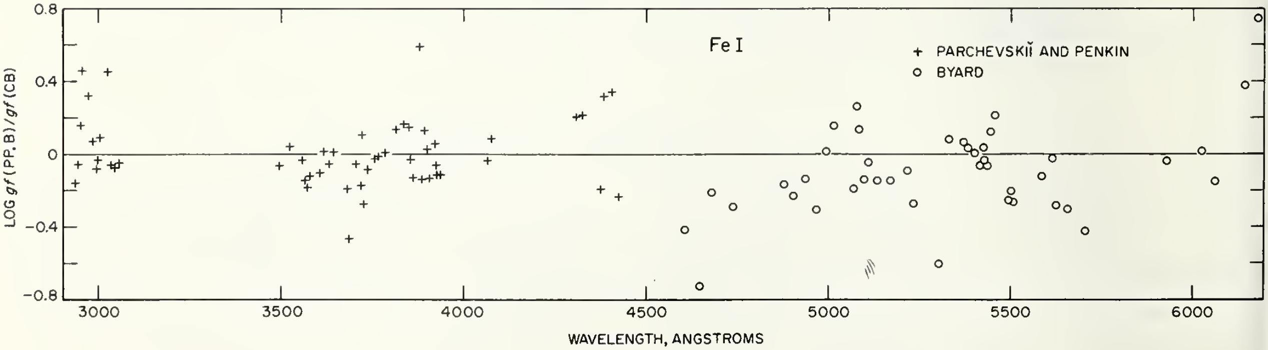

FIGURE 1. *Ratio of absolute oscillator strenths for Fe I from independent measurements to those from Corliss and Bozman in the wavelength range 2900 to 6200 Å.*

taken the opportunity here to correct a few errors recently discovered to exist in [2]. The previously employed "normalization function," which adjusted *gf*-values on the basis of the upper energy levels of the transitions was also removed for this work, as noted above.

Col. 6: the values of $\log(gf\lambda)$.

Cols. 7–10: a presentation in computer exponential format of the quantities *gf*, *f*, *gA*, and *A*. In this number format, the interior sign and the succeeding digits represent the power of ten by which the preceding digits are to be multiplied. The weighted transition probability (*gA*) and *A* are stated in units of second $^{-1}$.

In table 2 the wavelengths, energy levels, *J*-values, and transition probabilities (Einstein *A*-values, in sec^{-1}) for the lines are presented again. However, the data have here been sorted by upper energy level in order to document the exact lines and *A*-values that were employed by us in the calculations for our compilation of mean radiative lifetimes for energy states of iron [12].

4. Discussion of the Results

A detailed assessment of the accuracy of the *absolute* scale for the values quoted in table 1 can be found in section 5 of reference 1. Briefly, it appears that this scale may be too high by about 25 percent. The *relative* accuracy of the values will vary greatly from line to line, depending on the number and origin of the observations contributing to it.

The best available evidence would seem to support our belief that the data presented here do not suffer from any serious systematic error. We feel that this homogeneity and the extensive wavelength coverage justifies, in view of the great interest attached to iron, the present recalculation of the iron data.

Radiative lifetimes for over 400 energy states of neutral iron have been derived by the authors from the *A*-values presented here and are being published in the NBS Journal of Research [12].

5. References

[1] C. H. Corliss and B. Warner, J. Res. NBS **70A** (Phys. and and Chem.), No. 4, 325 (1966).

[2] C. H. Corliss and B. Warner, Astrophysical J. Suppl. **8**, 395 No. 83 (1964).

[3] C. H. Corliss and W. R. Bozman, Experimental Transition Probabilities, NBS Monograph 53 (1962).

[4] P. L. Byard, J. Quant. Spectrosc. Radiat. Transfer **7**, 559 (1967).

[5] M. Huber and F. L. Tobey Scientific Report No. 16, Shock Tube Spectroscopy Laboratory, Harvard College Observatory (1967). Also Astrophys. J. (in press).

[6] N. P. Penkin, J. Quant. Spectrosc. Radiat. Transfer **4**, 41 (1964). Translated by J. L. Tech, Smithsonian Astrophysical Observatory, Astronomical Papers Translated from the Russian, No. 3, June 1964.

[7] B. Warner and C. R. Cowley. J. Quant. Spectrosc. Radiat. Transfer **7**, 751 (1967).

[8] C. E. Moore, Atomic Energy Levels, NBS Circ. 467, II, 49 (1952).

[9] C. C. Kiess, V. C. Rubin, and C. E. Moore, J. Res. NBS **65A** (Phys. and Chem.), No. 1, 1 (1961).

[10] C. E. Moore, A Multiplet Table of Astrophysical Interest, Contrib. Princeton Univ. Obs. No. 20 (1945).

[11] C. E. Moore, An Ultraviolet Multiplet Table, NBS Circ. 488, Sec. 2 (1952).

[12] C. H. Corliss and J. Tech, J. Res. NBS **71A** (Phys. and Chem.) No. 6, 567 (1967).

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
2084.122	0−47967	UV 33	4−3	1.17	4.49	1.49+01	1.66+00	2.30+10	3.28+09
2157.795	416−46745	UV 24	3−3	.89	4.23	7.80+00	1.11+00	1.12+10	1.60+09
2164.550	704−46889	UV 24	2−2	.55	3.89	3.58+00	7.16−01	5.10+09	1.02+09
2166.769	0−46137	UV 21	4−3	1.14	4.47	1.37+01	1.52+00	1.95+10	2.78+09
2171.298	704−46745	UV 24	2−3	.24	3.58	1.75+00	3.49−01	2.47+09	3.53+08
2178.080	416−46314	UV 21	3−2	.79	4.13	6.14+00	8.77−01	8.64+09	1.73+09
2178.120	704−46601	UV 22	2−1	.44	3.78	2.76+00	5.52−01	3.88+09	1.29+09
2186.483	416−46137	UV 21	3−3	.55	3.89	3.53+00	5.04−01	4.92+09	7.03+08
2186.893	888−46601	UV 22	1−1	−.03	3.31	9.35−01	3.12−01	1.30+09	4.34+08
2187.195	704−46410	UV 21	2−1	.55	3.89	3.54+00	7.08−01	4.94+09	1.65+09
2191.836	704−46314	UV 21	2−2	.48	3.82	3.01+00	6.02−01	4.18+09	8.35+08
2196.043	888−46410	UV 21	1−1	.43	3.77	2.69+00	8.95−01	3.71+09	1.24+09
2200.370	978−46410	UV 21	0−1	.33	3.67	2.13+00	2.13+00	2.94+09	9.79+08
2200.723	888−46314	UV 21	1−2	.30	3.64	1.99+00	6.62−01	2.74+09	5.47+08
2248.858	6928−51381	UV 70	5−4	−.35	3.01	4.51−01	4.10−02	5.95+08	6.61+07
2250.791	0−44415	UV 16	4−4	−.79	2.56	1.62−01	1.80−02	2.14+08	2.37+07
2259.511	0−44244	UV 15	4−5	−.40	2.95	3.98−01	4.42−02	5.20+08	4.73+07
2264.389	6928−51077	UV 71	5−4	.03	3.38	1.07+00	9.70−02	1.39+09	1.54+08
2265.055	416−44551	UV 16	3−3	−.79	2.57	1.62−01	2.32−02	2.11+08	3.01+07
2266.903	7728−51828	UV 70	3−2	−.43	2.93	3.71−01	5.31−02	4.82+08	9.64+07
2267.085	416−44512	UV 17	3−2	−.65	2.71	2.24−01	3.20−02	2.91+08	5.81+07
2267.465	6928−51017	UV 70	5−5	.05	3.41	1.13+00	1.03−01	1.47+09	1.34+08
2269.099	704−44761	UV 16	2−1	−.78	2.58	1.66−01	3.32−02	2.15+08	7.17+07
2270.863	0−44023	UV 15	4−4	−1.19	2.17	6.46−02	7.17−03	8.35+07	9.28+06
2271.781	7377−51381	UV 70	4−4	−.20	3.16	6.37−01	7.08−02	8.24+08	9.15+07
2272.070	416−44415	UV 16	3−4	−.62	2.74	2.40−01	3.43−02	3.10+08	3.44+07
2272.816	7377−51361	UV 71	4−3	−.21	3.15	6.21−01	6.90−02	8.02+08	1.15+08
2275.189	888−44827	UV 16	1−0	−1.08	2.28	8.32−02	2.77−02	1.07+08	1.07+08
2276.026	0−43923	UV 14	4−3	−.31	3.05	4.90−01	5.44−02	6.31+08	9.01+07
2277.098	7728−51630	UV 71	3−2	−.42	2.94	3.79−01	5.41−02	4.87+08	9.75+07
2277.672	7728−51619	UV 70	3−3	−.42	2.94	3.78−01	5.40−02	4.86+08	6.95+07
2279.922	704−44551	UV 16	2−3	−.41	2.95	3.89−01	7.78−02	4.99+08	7.13+07
2280.222	7986−51828	UV 70	2−2	−.10	3.26	7.94−01	1.59−01	1.02+09	2.04+08
2283.304	978−44761	UV 16	0−1	−.99	2.37	1.02−01	1.02−01	1.31+08	4.36+07
2283.656	888−44664	UV 16	1−2	−.97	2.39	1.07−01	3.57−02	1.37+08	2.74+07
2284.086	416−44184	UV 14	3−2	−.36	3.00	4.37−01	6.24−02	5.58+08	1.12+08
2287.250	704−44411	UV 14	2−1	−.26	3.10	5.50−01	1.10−01	7.01+08	2.34+08
2289.032	8155−51828	UV 70	1−2	−.23	3.13	5.89−01	1.96−01	7.49+08	1.50+08
2290.546	7986−51630	UV 71	2−2	−.18	3.18	6.58−01	1.32−01	8.37+08	1.67+08
2291.122	7728−51361	UV 71	3−3	−.11	3.25	7.82−01	1.12−01	9.94+08	1.42+08
2292.525	416−44023	UV 15	3−4	−.71	2.65	1.95−01	2.79−02	2.47+08	2.75+07
2294.406	888−44459	UV 14	1−0	−.58	2.78	2.63−01	8.77−02	3.33+08	3.33+08
2296.928	888−44411	UV 14	1−1	−1.00	2.36	1.00−01	3.33−02	1.26+08	4.21+07
2297.788	416−43923	UV 14	3−3	−.25	3.11	5.62−01	8.03−02	7.10+08	1.01+08
2298.170	0−43500	UV 14	4−4	−.16	3.20	6.92−01	7.69−02	8.74+08	9.71+07
2298.657	888−44378	UV 15	1−1	−1.30	2.06	5.01−02	1.67−02	6.33+07	2.11+07
2299.221	704−44184	UV 14	2−2	−.56	2.80	2.75−01	5.51−02	3.48+08	6.95+07
2300.140	704−44166	UV 15	2−3	−.58	2.78	2.63−01	5.26−02	3.32+08	4.74+07
2301.685	978−44411	UV 14	0−1	−.82	2.54	1.51−01	1.51−01	1.91+08	6.35+07
2303.422	978−44378	UV 15	0−1	−.77	2.59	1.70−01	1.70−01	2.13+08	7.12+07
2303.582	888−44285	UV 15	1−2	−.68	2.68	2.09−01	6.96−02	2.63+08	5.25+07
2309.000	888−44184	UV 14	1−2	−.49	2.87	3.24−01	1.08−01	4.05+08	8.10+07
2313.105	704−43923	UV 14	2−3	−.32	3.04	4.79−01	9.57−02	5.97+08	8.52+07
2320.358	416−43500	UV 14	3−4	−.31	3.06	4.90−01	7.00−02	6.07+08	6.74+07
2341.575	416−43109	UV 13	3−4	−1.42	1.95	3.80−02	5.43−03	4.62+07	5.14+06
2350.408	0−42533	UV 11	4−3	−1.69	1.68	2.04−02	2.27−03	2.47+07	3.52+06
2355.327	416−42860	UV 11	3−2	−1.33	2.04	4.68−02	6.68−03	5.62+07	1.12+07
2356.196	7377−49805		4−3	−.12	3.25	7.54−01	8.37−02	9.05+08	1.29+08
2369.457	888−43079	UV 11	1−1	−1.36	2.01	4.37−02	1.46−02	5.19+07	1.73+07
2371.431	704−42860	UV 11	2−2	−.97	2.41	1.07−01	2.14−02	1.27+08	2.54+07
2373.625	416−42533	UV 11	3−3	−.63	2.75	2.34−01	3.35−02	2.78+08	3.96+07
2374.519	978−43079	UV 11	0−1	−1.06	2.32	8.71−02	8.71−02	1.03+08	3.43+07
2381.836	888−42860	UV 11	1−2	−.88	2.50	1.32−01	4.39−02	1.55+08	3.10+07
2389.973	704−42533	UV 11	2−3	−.86	2.52	1.38−01	2.76−02	1.61+08	2.30+07
2408.045	7728−49243	UV 68	3−3	−1.79	1.60	1.64−02	2.34−03	1.89+07	2.69+06
2411.558	6928−48383		5−5	−1.08	2.30	8.24−02	7.49−03	9.45+07	8.59+06
2429.810	8155−49298	UV 68	1−1	−1.34	2.04	4.54−02	1.51−02	5.12+07	1.71+07
2433.056	8155−49243	UV 68	1−2	−.73	2.66	1.88−01	6.27−02	2.12+08	4.24+07
2438.183	6928−47930	UV 62	5−4	−.51	2.88	3.12−01	2.83−02	3.50+08	3.89+07
2439.630	11976−52954		4−3	−.61	2.78	2.46−01	2.73−02	2.75+08	3.93+07

Table 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
2439.743	19390–60366	UV157	6–6	1.58	4.97	3.79+01	2.92+00	4.25+10	3.27+09
2440.106	19788–60758	UV157	4–4	1.34	4.73	2.18+01	2.42+00	2.44+10	2.71+09
2442.567	19621–60549	UV157	5–5	1.51	4.90	3.22+01	2.92+00	3.60+10	3.27+09
2443.873	6928–47835	UV 63	5–5	−.34	3.05	4.59−01	4.17−02	5.12+08	4.66+07
2445.213	6928–47812	UV 63	5–4	−1.08	2.31	8.33−02	7.58−03	9.30+07	1.03+07
2447.711	0–40842	UV 9	4–3	−1.06	2.33	8.71−02	9.68−03	9.70+07	1.39+07
2450.439	12561–53358		3–3	−.56	2.83	2.74−01	3.91−02	3.04+08	4.35+07
2451.384	12969–53749		2–2	−.73	2.66	1.88−01	3.77−02	2.09+08	4.18+07
2453.477	7377–48123	UV 62	4–3	−.20	3.19	6.29−01	6.99−02	6.97+08	9.96+07
2453.568	19621–60366	UV157	5–6	.48	3.87	3.01+00	2.74−01	3.34+09	2.57+08
2457.598	6928–47606	UV 62	5–5	.31	3.70	2.02+00	1.84−01	2.24+09	2.03+08
2458.564	6928–47590	UV 59	5–4	−1.37	2.02	4.23−02	3.84−03	4.66+07	5.18+06
2462.182	416–41018	UV 9	3–2	−.72	2.67	1.91−01	2.72−02	2.10+08	4.19+07
2462.648	0–40594	UV 9	4–4	−.26	3.13	5.50−01	6.11−02	6.04+08	6.72+07
2463.728	7728–48305	UV 65	3–2	−.51	2.89	3.12−01	4.45−02	3.42+08	6.85+07
2465.150	7377–47930	UV 62	4–4	.20	3.60	1.60+00	1.78−01	1.75+09	1.95+08
2467.733	7728–48239	UV 62	3–2	−.46	2.93	3.48−01	4.97−02	3.81+08	7.63+07
2468.880	6928–47420	UV 59	5–5	.20	3.60	1.59+00	1.45−01	1.74+09	1.59+08
2470.961	7377–47834	UV 63	4–3	−.69	2.70	2.05−01	2.28−02	2.24+08	3.20+07
2472.343	6928–47363	UV 59	5–6	.03	3.42	1.08+00	9.77−02	1.17+09	9.03+07
2472.896	416–40842	UV 9	3–3	.04	3.43	1.10+00	1.57−01	1.20+09	1.71+08
2473.156	0–40422	UV 8	4–4	−.98	2.41	1.05−01	1.16−02	1.14+08	1.27+07
2474.815	7728–48123	UV 62	3–3	.30	3.69	1.99+00	2.84−01	2.17+09	3.09+08
2476.654	7986–48351	UV 62	2–1	−.36	3.04	4.42−01	8.83−02	4.80+08	1.60+08
2476.861	8155–48516	UV 65	1–1	−1.34	2.05	4.57−02	1.52−02	4.97+07	1.66+07
2479.481	7986–48305	UV 65	2–2	−.19	3.21	6.51−01	1.30−01	7.06+08	1.41+08
2479.777	704–41018	UV 9	2–2	.07	3.46	1.17+00	2.35−01	1.27+09	2.55+08
2483.272	0–40257	UV 9	4–5	.49	3.89	3.09+00	3.43−01	3.34+09	3.04+08
2483.531	7986–48239	UV 62	2–2	−.16	3.24	6.95−01	1.39−01	7.51+08	1.50+08
2484.186	888–41131	UV 9	1–1	.05	3.45	1.12+00	3.74−01	1.21+09	4.04+08
2484.530	11976–52213		4–3	−.72	2.68	1.92−01	2.13−02	2.07+08	2.96+07
2485.989	7377–47590	UV 59	4–4	−.73	2.66	1.84−01	2.05−02	1.99+08	2.21+07
2486.372	0–40207	UV 8	4–3	−1.00	2.40	1.00−01	1.11−02	1.08+08	1.54+07
2486.690	7728–47930	UV 62	3–4	−.15	3.25	7.14−01	1.02−01	7.70+08	8.56+07
2487.064	8155–48351	UV 62	1–1	.00	3.40	1.01+00	3.37−01	1.09+09	3.64+08
2487.370	704–40895	UV 10	2–2	−1.30	2.10	5.01−02	1.00−02	5.40+07	1.08+07
2488.144	416–40594	UV 9	3–4	.51	3.91	3.24+00	4.62−01	3.49+09	3.87+08
2488.942	20641–60807	UV164	4–3	.98	4.38	9.62+00	1.07+00	1.04+10	1.48+09
2489.751	978–41131	UV 9	0–1	.24	3.64	1.74+00	1.74+00	1.87+09	6.23+08
2489.917	8155–48305	UV 65	1–2	−.23	3.17	5.94−01	1.98−01	6.39+08	1.28+08
2490.645	704–40842	UV 9	2–3	.38	3.78	2.40+00	4.80−01	2.58+09	3.68+08
2491.156	888–41018	UV 9	1–2	.22	3.62	1.66+00	5.53−01	1.78+09	3.57+08
2491.983	20641–60758	UV163	4–4	.90	4.29	7.91+00	8.79−01	8.50+09	9.44+08
2492.640	7728–47834	UV 63	3–3	−1.05	2.35	8.94−02	1.28−02	9.60+07	1.37+07
2493.998	7728–47812	UV 63	3–4	−.54	2.86	2.89−01	4.13−02	3.10+08	3.44+07
2494.252	6928–47008	UV 57	5–5	−1.06	2.33	8.62−02	7.84−03	9.24+07	8.40+06
2495.869	6928–46982	UV 57	5–6	−.55	2.84	2.79−01	2.53−02	2.98+08	2.30+07
2496.534	7377–47420	UV 59	4–5	.12	3.52	1.33+00	1.47−01	1.42+09	1.29+08
2501.133	0–39970	UV 7	4–3	−.06	3.34	8.71−01	9.68−02	9.29+08	1.33+08
2501.695	6928–46889	UV 56	5–4	−.61	2.79	2.48−01	2.25−02	2.64+08	2.93+07
2503.491	20875–60807	UV164	3–3	.77	4.17	5.93+00	8.47−01	6.31+09	9.02+08
2504.101	20641–60564		4–3	−.30	3.10	5.00−01	5.55−02	5.32+08	7.60+07
2504.635	17727–57641		2–3	−1.39	2.01	4.08−02	8.17−03	4.34+07	6.20+06
2505.004	20641–60549	UV163	4–5	.36	3.76	2.28+00	2.53−01	2.42+09	2.20+08
2506.569	20875–60758	UV163	3–4	.68	4.08	4.77+00	6.81−01	5.06+09	5.62+08
2507.899	7728–47590	UV 59	3–4	−.00	3.40	9.91−01	1.42−01	1.05+09	1.17+08
2508.751	7986–47834	UV 63	2–3	−1.04	2.36	9.15−02	1.83−02	9.70+07	1.39+07
2508.948	7986–47831	UV 59	2–2	−2.00	1.40	1.00−02	2.01−03	1.06+07	2.13+06
2509.390	17727–57565		2–3	−.87	2.53	1.36−01	2.72−02	1.44+08	2.06+07
2510.836	416–40231	UV 7	3–2	.04	3.44	1.10+00	1.57−01	1.16+09	2.32+08
2512.266	6928–46721	UV 55	5–4	−.69	2.71	2.05−01	1.86−02	2.17+08	2.41+07
2512.361	416–40207	UV 8	3–3	−1.14	2.26	7.24−02	1.03−02	7.66+07	1.09+07
2515.848	12561–52297	UV104	3–2	−.94	2.46	1.14−01	1.63−02	1.20+08	2.41+07
2516.249	7377–47107	UV 57	4–4	−.98	2.42	1.04−01	1.16−02	1.10+08	1.22+07
2516.572	7728–47453	UV 61	3–4	−1.04	2.36	9.19−02	1.31−02	9.68+07	1.08+07
2517.658	7986–47693	UV 59	2–3	−.11	3.29	7.73−01	1.55−01	8.13+08	1.16+08
2518.103	704–40405	UV 7	2–1	−.08	3.32	8.32−01	1.66−01	8.75+08	2.92+08
2518.824	20875–60564		3–3	.41	3.81	2.56+00	3.66−01	2.70+09	3.85+08
2519.630	8155–47831	UV 59	1–2	−.20	3.20	6.33−01	2.11−01	6.65+08	1.33+08
2521.920	7377–47017	UV 58	4–3	−.84	2.56	1.43−01	1.59−02	1.50+08	2.14+07

Table 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe i *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
2522.488	7377–47008	UV 57	4–5	−.75	2.65	1.76−01	1.96−02	1.85+08	1.68+07
2522.850	0–39626	UV 7	4–4	.50	3.90	3.16+00	3.51−01	3.31+09	3.68+08
2524.294	888–40491	UV 7	1–0	−.20	3.20	6.31−01	2.10−01	6.60+08	6.60+08
2527.436	416–39970	UV 7	3–3	.23	3.63	1.70+00	2.43−01	1.77+09	2.53+08
2528.910	20641–60172	UV162	4–4	.61	4.01	4.07+00	4.53−01	4.25+09	4.72+08
2529.136	704–40231	UV 7	2–2	−.08	3.32	8.32−01	1.66−01	8.67+08	1.73+08
2529.837	888–40405	UV 7	1–1	−.59	2.81	2.57−01	8.57−02	2.68+08	8.93+07
2530.694	704–40207	UV 8	2–3	−1.30	2.10	5.01−02	1.00−02	5.22+07	7.46+06
2531.510	20875–60365	UV162	3–3	.68	4.08	4.78+00	6.82−01	4.97+09	7.10+08
2532.876	7728–47197	UV 56	3–2	−1.26	2.14	5.48−02	7.82−03	5.69+07	1.14+07
2535.609	978–40405	UV 7	0–1	−.19	3.21	6.46−01	6.46−01	6.70+08	2.23+08
2537.460	11976–51374	UV102	4–5	−.30	3.11	5.06−01	5.62−02	5.24+08	4.76+07
2539.358	7377–46745	UV 55	4–3	−.78	2.63	1.67−01	1.85−02	1.73+08	2.46+07
2539.575	7728–47093	UV 56	3–3	−1.89	1.51	1.28−02	1.83−03	1.32+07	1.89+06
2540.973	888–40231	UV 7	1–2	−.12	3.29	7.59−01	2.53−01	7.84+08	1.57+08
2542.101	21039–60365	UV162	2–3	1.83	5.23	6.75+01	1.35+01	6.96+10	9.95+09
2543.920	20875–60172	UV162	3–4	1.78	5.19	6.03+01	8.61+00	6.21+10	6.90+09
2544.706	20641–59927	UV162	4–5	1.47	4.87	2.92+01	3.25+00	3.01+10	2.74+09
2545.980	704–39970	UV 7	2–3	−.08	3.33	8.32−01	1.66−01	8.56+08	1.22+08
2549.614	416–39626	UV 7	3–4	−.28	3.13	5.25−01	7.50−02	5.38+08	5.98+07
2550.812	7986–47177	UV 55	2–1	−1.28	2.12	5.23−02	1.05−02	5.36+07	1.79+07
2552.604	888–40052	UV 8	1–2	−1.65	1.76	2.24−02	7.46−03	2.29+07	4.58+06
2552.832	7728–46889	UV 55	3–2	−1.13	2.28	7.48−02	1.07−02	7.66+07	1.53+07
2554.518	22947–62081		1–2	.12	3.53	1.33+00	4.42−01	1.36+09	2.71+08
2555.648	8155–47272	UV 58	1–1	−1.69	1.72	2.04−02	6.80−03	2.08+07	6.95+06
2556.304	12561–51668	UV102	3–4	−.22	3.19	6.03−01	8.62−02	6.16+08	6.84+07
2556.862	6928–46027	UV 53	5–6	−1.03	2.37	9.27−02	8.42−03	9.45+07	7.27+06
2557.268	11976–51069	UV101	4–5	−1.40	2.01	3.96−02	4.40−03	4.04+07	3.67+06
2560.558	8155–47197	UV 56	1–2	−1.20	2.21	6.29−02	2.10−02	6.40+07	1.28+07
2561.262	7986–47017	UV 58	2–3	−1.51	1.89	3.06−02	6.12−03	3.11+07	4.45+06
2561.856	8155–47177	UV 55	1–1	−1.26	2.15	5.47−02	1.82−02	5.56+07	1.85+07
2562.224	8155–47172	UV 55	1–0	−.98	2.43	1.04−01	3.48−02	1.06+08	1.06+08
2563.820	7728–46721	UV 55	3–4	−1.80	1.61	1.59−02	2.27−03	1.62+07	1.79+06
2564.561	8155–47136	UV 58	1–2	−1.20	2.21	6.27−02	2.09−02	6.36+07	1.27+07
2567.860	17927–56859	UV130	1–2	−.17	3.24	6.79−01	2.26−01	6.87+08	1.37+08
2568.862	7986–46902	UV 54	2–1	−1.13	2.28	7.48−02	1.50−02	7.56+07	2.52+07
2569.595	6928–45833	UV 52	5–4	−1.09	2.32	8.13−02	7.39−03	8.21+07	9.12+06
2569.742	7986–46889	UV 55	2–2	−1.06	2.35	8.79−02	1.76−02	8.88+07	1.78+07
2571.570	12561–51436	UV103	3–3	−1.67	1.74	2.13−02	3.04−03	2.14+07	3.06+06
2572.752	12969–51826	UV102	2–3	−.67	2.74	2.14−01	4.27−02	2.15+08	3.08+07
2576.692	6928–45726	UV 52	5–5	−.22	3.19	6.03−01	5.48−02	6.05+08	5.50+07
2579.266	7986–46745	UV 55	2–3	−1.32	2.09	4.81−02	9.62−03	4.82+07	6.89+06
2580.066	8155–46902	UV 54	1–1	−1.57	1.85	2.72−02	9.06−03	2.72+07	9.08+06
2580.281	12561–51305		3–4	−.82	2.59	1.51−01	2.16−02	1.52+08	1.69+07
2580.454	7986–46727	UV 54	2–2	−1.76	1.65	1.75−02	3.49−03	1.75+07	3.50+06
2580.561	12969–51708		2–2	−.80	2.61	1.60−01	3.19−02	1.60+08	3.20+07
2580.939	8155–46889	UV 55	1–2	−1.67	1.75	2.16−02	7.19−03	2.16+07	4.32+06
2584.537	6928–45608	UV 52	5–6	.16	3.57	1.45+00	1.31−01	1.44+09	1.11+08
2586.557	21716–60366	UV171	5–6	.23	3.64	1.70+00	1.54−01	1.69+09	1.30+08
2592.285	21999–60564		4–3	.27	3.68	1.86+00	2.06−01	1.84+09	2.63+08
2593.510	19351–57897	UV146	5–5	.53	3.95	3.42+00	3.11−01	3.39+09	3.09+08
2594.150	7377–45914	UV 52	4–3	−.92	2.49	1.20−01	1.34−02	1.19+08	1.70+07
2595.422	8155–46673	UV 54	1–0	−2.01	1.41	9.80−03	3.27−03	9.71+06	9.71+06
2598.855	12969–51436	UV103	2–3	−1.09	2.32	8.08−02	1.62−02	7.98+07	1.14+07
2599.565	7377–45833	UV 52	4–4	.10	3.51	1.26+00	1.40−01	1.24+09	1.38+08
2605.658	6928–45295	UV 51	5–5	−.86	2.56	1.38−01	1.25−02	1.36+08	1.23+07
2606.828	7377–45726	UV 52	4–5	.10	3.52	1.26+00	1.40−01	1.24+09	1.12+08
2609.220	22249–60564		3–3	.35	3.77	2.23+00	3.19−01	2.19+09	3.12+08
2610.750	704–38996	UV 6	2–1	−2.03	1.39	9.33−03	1.87−03	9.13+06	3.04+06
2612.773	416–38678	UV 6	3–2	−1.80	1.62	1.58−02	2.26−03	1.55+07	3.10+06
2614.495	7728–45965	UV 52	3–2	−1.08	2.34	8.32−02	1.19−02	8.12+07	1.62+07
2618.019	7728–45914	UV 52	3–3	−.22	3.20	6.03−01	8.61−02	5.86+08	8.38+07
2618.711	0–38175	UV 6	4–3	−1.74	1.68	1.82−02	2.02−03	1.77+07	2.53+06
2623.367	888–38996	UV 6	1–1	−1.84	1.58	1.45−02	4.82−03	1.40+07	4.67+06
2623.532	7728–45833	UV 52	3–4	.00	3.42	1.00+00	1.43−01	9.69+08	1.08+08
2627.230	7377–45428	UV 51	4–4	−1.69	1.73	2.04−02	2.27−03	1.97+07	2.19+06
2629.579	978–38996	UV 6	0–1	−2.09	1.33	8.13−03	8.13−03	7.84+06	2.61+06
2632.238	7986–45965	UV 52	2–2	−.32	3.10	4.79−01	9.57−02	4.61+08	9.22+07
2632.595	704–38678	UV 6	2–2	−1.70	1.72	2.00−02	3.99−03	1.92+07	3.84+06
2635.810	7986–45914	UV 52	2–3	−.07	3.35	8.51−01	1.70−01	8.17+08	1.17+08

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
2636.479	7377−45295	UV 51	4−5	−1.12	2.30	7.59−02	8.43−03	7.28+07	6.62+06
2641.647	7377−45221	UV 50	4−3	−.63	2.79	2.34−01	2.60−02	2.24+08	3.20+07
2643.999	8155−45965	UV 52	1−2	−.09	3.33	8.13−01	2.71−01	7.76+08	1.55+08
2645.423	888−38678	UV 6	1−2	−2.05	1.37	8.91−03	2.97−03	8.49+06	1.70+06
2647.559	416−38175	UV 6	3−3	−1.72	1.70	1.91−02	2.72−03	1.81+07	2.59+06
2648.164	11976−49727	UV 99	4−4	−1.61	1.82	2.48−02	2.75−03	2.36+07	2.62+06
2648.548	24336−62081		2−2	.34	3.77	2.20+00	4.40−01	2.09+09	4.19+08
2651.708	7728−45428	UV 51	3−4	−1.12	2.30	7.59−02	1.08−02	7.20+07	8.00+06
2655.140	11976−49628	UV100	4−4	−1.75	1.67	1.78−02	1.97−03	1.68+07	1.87+06
2656.145	19390−57028	UV156	6−7	.82	4.24	6.56+00	5.04−01	6.20+09	4.13+08
2656.793	11976−49604	UV 99	4−5	−.79	2.63	1.62−01	1.80−02	1.53+08	1.39+07
2660.396	7986−45563	UV 51	2−3	−1.30	2.12	5.01−02	1.00−02	4.72+07	6.75+06
2661.196	7986−45552	UV 50	2−1	−1.74	1.69	1.82−02	3.64−03	1.71+07	5.71+06
2662.057	7728−45282	UV 50	3−2	−.72	2.71	1.91−01	2.72−02	1.79+08	3.59+07
2666.400	7728−45221	UV 50	3−3	−.94	2.49	1.15−01	1.64−02	1.08+08	1.54+07
2666.813	6928−44415	UV 48	5−4	−.35	3.08	4.47−01	4.06−02	4.19+08	4.65+07
2666.966	11976−49461	UV100	4−5	−.33	3.10	4.71−01	5.23−02	4.42+08	4.02+07
2667.914	704−38175	UV 6	2−3	−2.20	1.23	6.31−03	1.26−03	5.91+06	8.45+05
2669.492	19621−57070	UV156	5−6	.57	4.00	3.72+00	3.38−01	3.48+09	2.68+08
2673.214	8155−45552	UV 50	1−1	−1.16	2.27	6.92−02	2.31−02	6.46+07	2.15+07
2679.063	6928−44244	UV 47	5−5	−.14	3.29	7.24−01	6.59−02	6.73+08	6.12+07
2680.454	7986−45282	UV 50	2−2	−.81	2.62	1.55−01	3.10−02	1.44+08	2.88+07
2680.910	12561−49851	UV100	3−3	−1.74	1.69	1.82−02	2.59−03	1.69+07	2.41+06
2681.586	19562−56843	UV145	4−4	.57	4.00	3.72+00	4.13−01	3.45+09	3.83+08
2684.857	7986−45221	UV 50	2−3	−1.97	1.46	1.07−02	2.14−03	9.91+06	1.42+06
2689.213	7377−44551	UV 48	4−3	−.24	3.19	5.75−01	6.39−02	5.31+08	7.58+07
2689.830	12561−49727	UV 99	3−4	−.42	3.01	3.84−01	5.48−02	3.54+08	3.93+07
2690.069	0−37163	UV 4	4−3	−2.03	1.40	9.33−03	1.04−03	8.60+06	1.23+06
2692.250	11976−49109	UV 98	4−4	−1.20	2.23	6.30−02	7.01−03	5.80+07	6.45+06
2692.658	8155−45282	UV 50	1−2	−1.89	1.54	1.29−02	4.29−03	1.19+07	2.37+06
2694.222	416−37521	UV 4	3−2	−3.01	.42	9.77−04	1.40−04	8.98+05	1.80+05
2694.536	19351−56452	UV144	5−4	.63	4.06	4.24+00	3.85−01	3.89+09	4.32+08
2695.036	6928−44023	UV 47	5−4	−1.35	2.08	4.47−02	4.06−03	4.10+07	4.56+06
2695.662	19757−56843	UV145	3−4	.65	4.08	4.47+00	6.39−01	4.11+09	4.56+08
2696.284	19351−56428	UV143	5−5	1.00	4.44	1.01+01	9.20−01	9.28+09	8.44+08
2697.022	12561−49628	UV100	3−4	−.45	2.98	3.55−01	5.07−02	3.25+08	3.61+07
2699.108	7377−44415	UV 48	4−4	−.49	2.94	3.24−01	3.60−02	2.96+08	3.29+07
2701.908	20641−57641	UV161	4−3	−.05	3.38	8.94−01	9.93−02	8.16+08	1.17+08
2702.453	19390−56383	UV154	6−5	.59	4.02	3.90+00	3.00−01	3.56+09	3.24+08
2706.012	19390−56334	UV154	6−6	.89	4.32	7.71+00	5.93−01	7.02+09	5.40+08
2706.583	7728−44664	UV 48	3−2	−.08	3.35	8.32−01	1.19−01	7.57+08	1.51+08
2707.451	20641−57565		4−3	.21	3.65	1.64+00	1.82−01	1.49+09	2.13+08
2708.570	20641−57550	UV161	4−4	1.09	4.53	1.24+01	1.38+00	1.13+10	1.25+09
2709.989	19562−56452	UV144	4−4	.27	3.70	1.85+00	2.05−01	1.68+09	1.87+08
2710.543	12969−49851	UV100	2−3	−.26	3.17	5.48−01	1.10−01	4.98+08	7.11+07
2711.656	7377−44244	UV 47	4−5	−.44	2.99	3.63−01	4.03−02	3.29+08	2.99+07
2714.062	20875−57709	UV161	3−2	.33	3.76	2.12+00	3.04−01	1.92+09	3.85+08
2714.870	7728−44551	UV 48	3−3	−1.20	2.23	6.31−02	9.01−03	5.71+07	8.16+06
2715.323	704−37521	UV 4	2−2	−2.70	.73	2.00−03	3.99−04	1.81+06	3.61+05
2716.410	19621−56423	UV154	5−4	−.17	3.27	6.83−01	6.21−02	6.18+08	6.86+07
2717.368	7377−44166	UV 47	4−3	−1.70	1.73	2.00−02	2.22−03	1.80+07	2.57+06
2717.787	7728−44512	UV 49	3−2	−1.08	2.35	8.32−02	1.19−02	7.51+07	1.50+07
2718.436	7986−44761	UV 48	2−1	−.28	3.15	5.25−01	1.05−01	4.74+08	1.58+08
2719.027	0−36767	UV 5	4−3	.15	3.58	1.41+00	1.57−01	1.27+09	1.82+08
2719.418	19621−56383	UV154	5−5	.95	4.39	8.94+00	8.12−01	8.06+09	7.33+08
2720.194	17550−54301	UV129	3−4	.30	3.73	1.97+00	2.82−01	1.78+09	1.98+08
2720.516	416−37163	UV 4	3−3	−2.71	.72	1.95−03	2.79−04	1.76+06	2.51+05
2720.904	416−37158	UV 5	3−2	−.10	3.33	7.94−01	1.13−01	7.16+08	1.43+08
2722.032	11976−48703	UV 97	4−4	−1.47	1.96	3.36−02	3.73−03	3.02+07	3.36+06
2723.579	704−37410	UV 5	2−1	−.42	3.02	3.80−01	7.60−02	3.42+08	1.14+08
2724.344	19757−56452	UV144	3−4	.02	3.45	1.04+00	1.49−01	9.35+08	1.04+08
2724.954	7728−44415	UV 48	3−4	−.38	3.06	4.17−01	5.96−02	3.74+08	4.16+07
2725.311	12561−49243	UV 98	3−3	−.99	2.45	1.03−01	1.48−02	9.29+07	1.33+07
2725.602	7986−44664	UV 48	2−2	−1.62	1.82	2.40−02	4.80−03	2.15+07	4.31+06
2725.805	20875−57550	UV161	3−4	.19	3.63	1.56+00	2.23−01	1.40+09	1.56+08
2726.054	8155−44827	UV 48	1−0	−.34	3.10	4.57−01	1.52−01	4.10+08	4.10+08
2726.237	21039−57709	UV161	2−2	.88	4.31	7.54+00	1.51+00	6.77+09	1.35+09
2728.021	7377−44023	UV 47	4−4	−.70	2.74	2.00−01	2.22−02	1.79+08	1.99+07
2728.819	19788−56423	UV154	4−4	.79	4.23	6.23+00	6.92−01	5.58+09	6.20+08
2728.970	888−37521	UV 4	1−2	−2.50	.94	3.16−03	1.05−03	2.83+06	5.66+05

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
2730.982	8155-44761	UV 48	1-1	-.82	2.62	1.51-01	5.05-02	1.35+08	4.51+07
2731.281	21039-57641	UV161	2-3	.30	3.74	2.00+00	4.00-01	1.79+09	2.56+08
2733.582	6928-43500	UV 46	5-4	.42	3.86	2.63+00	2.39-01	2.35+09	2.61+08
2734.006	7986-44551	UV 48	2-3	-.81	2.63	1.55-01	3.10-02	1.38+08	1.97+07
2734.269	17550-54112	UV125	3-2	.40	3.84	2.52+00	3.60-01	2.25+09	4.49+08
2734.616	7728-44285	UV 47	3-2	-1.34	2.10	4.57-02	6.53-03	4.08+07	8.15+06
2735.476	7377-43923	UV 46	4-3	.16	3.60	1.45+00	1.61-01	1.29+09	1.84+08
2736.960	7986-44512	UV 49	2-2	-.32	3.12	4.79-01	9.57-02	4.26+08	8.52+07
2737.311	888-37410	UV 5	1-1	-.36	3.08	4.37-01	1.46-01	3.89+08	1.30+08
2738.214	8155-44664	UV 48	1-2	-1.52	1.92	3.02-02	1.01-02	2.69+07	5.37+06
2741.100	24336-60807	UV181	2-3	.69	4.13	4.93+00	9.87-01	4.38+09	6.26+08
2741.578	12969-49433	UV 98	2-2	-1.03	2.41	9.37-02	1.87-02	8.32+07	1.66+07
2742.016	704-37163	UV 4	2-3	-1.92	1.52	1.20-02	2.40-03	1.07+07	1.52+06
2742.255	7728-44184	UV 46	3-2	-.38	3.06	4.17-01	5.96-02	3.70+08	7.40+07
2742.406	704-37158	UV 5	2-2	-.32	3.12	4.79-01	9.57-02	4.24+08	8.49+07
2743.564	7728-44166	UV 47	3-3	-.67	2.77	2.14-01	3.05-02	1.89+08	2.71+07
2744.069	978-37410	UV 5	0-1	-.65	2.79	2.24-01	2.24-01	1.98+08	6.61+07
2744.529	7986-44411	UV 46	2-1	-.42	3.02	3.80-01	7.60-02	3.37+08	1.12+08
2746.982	6928-43321	UV 45	5-6	.13	3.57	1.35+00	1.23-01	1.19+09	9.17+07
2747.556	17727-54112	UV125	2-2	.15	3.59	1.42+00	2.83-01	1.25+09	2.50+08
2749.688	8155-44512	UV 49	1-2	-1.33	2.11	4.68-02	1.56-02	4.13+07	8.25+06
2750.142	416-36767	UV 5	3-3	-.38	3.06	4.17-01	5.96-02	3.68+08	5.25+07
2750.708	17927-54271	UV125	1-1	.00	3.44	1.01+00	3.36-01	8.87+08	2.96+08
2750.872	17550-53892	UV128	3-3	.48	3.91	2.99+00	4.27-01	2.63+09	3.76+08
2751.808	12969-49298		2-1	-1.28	2.16	5.21-02	1.04-02	4.59+07	1.53+07
2753.687	8155-44459	UV 46	1-0	-.59	2.85	2.57-01	8.57-02	2.26+08	2.26+08
2754.033	7986-44285	UV 47	2-2	-.63	2.81	2.34-01	4.69-02	2.06+08	4.12+07
2754.427	7728-44023	UV 47	3-4	-1.02	2.42	9.55-02	1.36-02	8.40+07	9.33+06
2755.184	19621-55906	UV153	5-4	-.06	3.38	8.74-01	7.94-02	7.68+08	8.53+07
2756.268	416-36686	UV 4	3-4	-1.04	2.40	9.12-02	1.30-02	8.01+07	8.90+06
2756.330	888-37158	UV 5	1-2	-.60	2.84	2.51-01	8.37-02	2.21+08	4.41+07
2757.317	8155-44411	UV 46	1-1	-.30	3.14	5.01-01	1.67-01	4.40+08	1.47+08
2759.814	8155-44378	UV 47	1-1	-.83	2.61	1.48-01	4.93-02	1.30+08	4.32+07
2761.480	19552-55754	UV140	1-2	-.41	3.03	3.88-01	1.29-01	3.39+08	6.79+07
2761.781	7986-44184	UV 46	2-2	-.20	3.24	6.31-01	1.26-01	5.52+08	1.10+08
2762.028	7728-43923	UV 46	3-3	-.15	3.29	7.08-01	1.01-01	6.19+08	8.84+07
2762.773	17927-54112	UV125	1-2	.03	3.47	1.07+00	3.58-01	9.39+08	1.88+08
2763.108	7986-44166	UV 47	2-3	-.70	2.74	2.00-01	3.99-02	1.74+08	2.49+07
2764.323	17727-53892	UV128	2-3	.31	3.75	2.02+00	4.04-01	1.76+09	2.52+08
2765.700	11976-48123	UV 92	4-3	-1.88	1.56	1.31-02	1.46-03	1.15+07	1.64+06
2766.910	8155-44285	UV 47	1-2	-.94	2.50	1.15-01	3.83-02	1.00+08	2.00+07
2767.523	7377-43500	UV 46	4-4	-.39	3.05	4.07-01	4.53-02	3.55+08	3.94+07
2768.432	17550-53661	UV126	3-3	-.27	3.17	5.35-01	7.65-02	4.66+08	6.66+07
2769.298	19390-55490	UV151	6-6	.70	4.14	4.98+00	3.83-01	4.33+09	3.33+08
2769.672	6928-43023	UV 44	5-4	-1.39	2.05	4.07-02	3.70-03	3.54+07	3.94+06
2770.695	17727-53808	UV123	2-1	-.42	3.02	3.79-01	7.59-02	3.30+08	1.10+08
2772.075	6928-42992	UV 45	5-5	-.32	3.12	4.79-01	4.35-02	4.15+08	3.78+07
2772.320	17550-53610		3-4	-.05	3.39	8.81-01	1.26-01	7.65+08	8.50+07
2772.511	17727-53785		2-3	-.12	3.32	7.54-01	1.51-01	6.55+08	9.35+07
2772.860	24119-60172	UV179	4-4	.40	3.84	2.51+00	2.79-01	2.18+09	2.42+08
2773.907	19390-55430	UV151	6-5	-.97	2.48	1.08-01	8.29-03	9.34+07	8.49+06
2774.150	17727-53763	UV127	2-3	-1.19	2.25	6.40-02	1.28-02	5.54+07	7.92+06
2774.730	8155-44184	UV 46	1-2	-.94	2.50	1.15-01	3.83-02	9.95+07	1.99+07
2778.221	6928-42912	UV 44	5-5	-.34	3.10	4.57-01	4.16-02	3.95+08	3.59+07
2780.526	11976-47930	UV 92	4-4	-1.73	1.72	1.88-02	2.09-03	1.62+07	1.80+06
2780.700	20641-56593	UV160	4-4	.05	3.49	1.12+00	1.24-01	9.66+08	1.07+08
2781.837	7986-43923	UV 46	2-3	-.82	2.62	1.51-01	3.03-02	1.30+08	1.86+07
2782.055	17727-53661	UV126	2-3	-.56	2.88	2.75-01	5.49-02	2.37+08	3.38+07
2784.017	20875-56783	UV160	3-3	-.40	3.04	3.94-01	5.63-02	3.39+08	4.84+07
2784.346	19621-55526	UV152	5-5	-.26	3.18	5.50-01	5.00-02	4.73+08	4.30+07
2786.180	17927-53808	UV123	1-1	-.89	2.55	1.29-01	4.29-02	1.10+08	3.68+07
2787.120	19621-55490	UV151	5-6	-.76	2.68	1.73-01	1.57-02	1.48+08	1.14+07
2787.933	11976-47835	UV 93	4-5	-.70	2.75	2.00-01	2.22-02	1.72+08	1.56+07
2788.106	6928-42784	UV 44	5-6	.43	3.88	2.69+00	2.45-01	2.31+09	1.78+08
2789.477	17550-53389	UV125	3-3	-.08	3.37	8.31-01	1.19-01	7.13+08	1.02+08
2789.803	21716-57550	UV170	5-4	.64	4.09	4.40+00	4.00-01	3.77+09	4.19+08
2790.762	17927-53749		1-2	-1.28	2.17	5.31-02	1.77-02	4.55+07	9.09+06
2791.787	19621-55430	UV151	5-5	.41	3.86	2.59+00	2.35-01	2.21+09	2.01+08
2792.397	12561-48362	UV 95	3-4	-1.04	2.40	9.02-02	1.29-02	7.72+07	8.57+06
2794.157	17550-53329	UV124	3-4	-1.04	2.40	9.03-02	1.29-02	7.71+07	8.57+06

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
2794.703	7728−43500	UV 46	3−4	−1.23	2.22	5.89−02	8.41−03	5.03+07	5.59+06
2795.006	0−35768	UV 3	4−4	−2.30	1.15	5.01−03	5.57−04	4.28+06	4.75+05
2795.541	7377−43138	UV 44	4−3	−1.16	2.29	6.92−02	7.69−03	5.90+07	8.44+06
2796.872	12561−48305	UV 96	3−2	−1.56	1.89	2.78−02	3.97−03	2.37+07	4.74+06
2797.776	7377−43109	UV 45	4−4	−.55	2.90	2.82−01	3.13−02	2.40+08	2.67+07
2802.285	26406−62081		1−2	.04	3.49	1.10+00	3.68−01	9.37+08	1.87+08
2803.168	416−36079	UV 3	3−3	−2.80	.65	1.58−03	2.26−04	1.35+06	1.92+05
2804.521	7377−43023	UV 44	4−4	−.32	3.13	4.79−01	5.32−02	4.06+08	4.51+07
2804.865	21999−57641	UV170	4−3	.23	3.68	1.70+00	1.89−01	1.44+09	2.06+08
2805.808	11976−47606	UV 92	4−5	−1.60	1.84	2.49−02	2.77−03	2.11+07	1.92+06
2806.072	18378−54005	UV139	2−3	−.71	2.74	1.97−01	3.93−02	1.66+08	2.38+07
2806.985	7377−42992	UV 45	4−5	−.21	3.24	6.17−01	6.85−02	5.22+08	4.75+07
2807.246	0−35612	UV 2	4−3	−2.68	.77	2.09−03	2.32−04	1.77+06	2.53+05
2808.328	7728−43326	UV 45	3−3	−1.43	2.02	3.72−02	5.31−03	3.14+07	4.49+06
2810.834	21999−57565		4−3	−.60	2.85	2.54−01	2.82−02	2.14+08	3.06+07
2811.160	12561−48123	UV 92	3−3	−1.88	1.57	1.31−02	1.88−03	1.11+07	1.58+06
2812.042	21999−57550	UV170	4−4	−.24	3.21	5.79−01	6.44−02	4.89+08	5.43+07
2813.288	7377−42912	UV 44	4−5	.23	3.68	1.70+00	1.89−01	1.43+09	1.30+08
2815.017	18378−53892	UV138	2−3	−.82	2.62	1.50−01	2.99−02	1.26+08	1.80+07
2815.506	12969−48476	UV 95	2−3	−1.05	2.40	8.89−02	1.78−02	7.48+07	1.07+07
2817.505	7728−43210	UV 44	3−2	−1.12	2.33	7.59−02	1.08−02	6.37+07	1.27+07
2819.286	22249−57709	UV170	3−2	.42	3.87	2.61+00	3.73−01	2.19+09	4.39+08
2820.804	416−35856	UV 2	3−2	−2.83	.62	1.48−03	2.11−04	1.24+06	2.48+05
2821.630	18378−53808	UV134	2−1	−1.42	2.03	3.79−02	7.59−03	3.18+07	1.06+07
2823.277	7728−43138	UV 44	3−3	−.22	3.23	6.03−01	8.61−02	5.04+08	7.20+07
2824.700	22249−57641	UV170	3−3	−.33	3.12	4.69−01	6.70−02	3.92+08	5.60+07
2825.557	7728−43109	UV 45	3−4	−.23	3.22	5.89−01	8.41−02	4.92+08	5.47+07
2825.689	0−35379	UV 3	4−5	−1.96	1.49	1.10−02	1.22−03	9.16+06	8.33+05
2825.995	704−36079	UV 3	2−3	−2.92	.53	1.20−03	2.40−04	1.00+06	1.43+05
2827.893	416−35768	UV 3	3−4	−2.29	1.16	5.13−03	7.33−04	4.28+06	4.75+05
2828.809	7986−43326	UV 45	2−3	−.91	2.54	1.23−01	2.46−02	1.03+08	1.46+07
2832.436	7728−43023	UV 44	3−4	.00	3.45	1.00+00	1.43−01	8.31+08	9.24+07
2833.401	18378−53661	UV137	2−3	−.61	2.84	2.45−01	4.90−02	2.03+08	2.90+07
2834.177	12561−47834	UV 93	3−3	−1.96	1.49	1.10−02	1.57−03	9.13+06	1.30+06
2834.414	12969−48239	UV 92	2−2	−1.93	1.52	1.18−02	2.36−03	9.80+06	1.96+06
2834.755	20641−55907	UV159	4−5	−.27	3.18	5.39−01	5.99−02	4.47+08	4.06+07
2835.457	0−35257	UV 2	4−4	−2.02	1.43	9.55−03	1.06−03	7.92+06	8.80+05
2835.951	12561−47812	UV 93	3−4	−1.15	2.30	7.09−02	1.01−02	5.88+07	6.54+06
2836.315	22650−57897	UV175	6−5	−.14	3.32	7.32−01	5.63−02	6.07+08	5.51+07
2838.120	7986−43210	UV 44	2−2	−.44	3.01	3.63−01	7.26−02	3.01+08	6.01+07
2840.423	416−35612	UV 2	3−3	−1.98	1.47	1.05−02	1.50−03	8.66+06	1.24+06
2840.938	17727−52916	UV123	2−2	−.86	2.59	1.37−01	2.75−02	1.13+08	2.27+07
2843.631	7377−42533	UV 43	4−3	−.54	2.91	2.88−01	3.20−02	2.38+08	3.40+07
2843.978	7986−43138	UV 44	2−3	.02	3.47	1.05+00	2.09−01	8.64+08	1.23+08
2845.596	7728−42860	UV 43	3−2	−.70	2.75	2.00−01	2.85−02	1.64+08	3.29+07
2845.714	11976−47107	UV 88	4−4	.09	3.54	1.22+00	1.36−01	1.01+09	1.12+08
2846.831	11976−47093	UV 87	4−3	−1.27	2.18	5.33−02	5.92−03	4.39+07	6.27+06
2848.715	7986−43079	UV 43	2−1	−1.18	2.27	6.61−02	1.32−02	5.43+07	1.81+07
2851.798	8155−43210	UV 44	1−2	−.02	3.44	9.55−01	3.18−01	7.83+08	1.57+08
2852.952	11976−47017	UV 89	4−3	−1.99	1.46	1.01−02	1.13−03	8.30+06	1.19+06
2853.685	11976−47008	UV 88	4−5	−1.50	1.95	3.13−02	3.48−03	2.56+07	2.33+06
2853.774	20875−55906	UV159	3−4	.19	3.65	1.55+00	2.22−01	1.27+09	1.41+08
2857.996	18378−53358		2−3	−.19	3.26	6.42−01	1.28−01	5.24+08	7.49+07
2858.897	888−35856	UV 2	1−2	−2.23	1.23	5.89−03	1.96−03	4.81+06	9.61+05
2861.996	17927−52858		1−1	−1.54	1.92	2.91−02	9.70−03	2.37+07	7.90+06
2862.495	8155−43079	UV 43	1−1	−1.34	2.12	4.57−02	1.52−02	3.72+07	1.24+07
2863.431	11976−46889	UV 87	4−4	−.40	3.06	4.02−01	4.46−02	3.27+08	3.63+07
2863.864	704−35612	UV 2	2−3	−1.76	1.70	1.74−02	3.48−03	1.41+07	2.02+06
2866.626	7986−42860	UV 43	2−2	−1.03	2.43	9.33−02	1.87−02	7.58+07	1.52+07
2867.311	12969−47834	UV 93	2−3	−1.07	2.39	8.54−02	1.71−02	6.93+07	9.90+06
2867.563	12969−47831	UV 90	2−2	−.98	2.48	1.05−01	2.10−02	8.52+07	1.70+07
2867.880	12561−47420	UV 91	3−2	- 1.72	1.74	1.92−02	2.74−03	1.55+07	3.11+06
2868.213	19757−54612	UV142	3−2	−.35	3.11	4.45−01	6.36−02	3.61+08	7.22+07
2868.454	18378−53230	UV135	2−1	−.18	3.28	6.59−01	1.32−01	5.34+08	1.78+08
2869.308	416−35257	UV 2	3−4	−1.56	1.90	2.75−02	3.93−03	2.23+07	2.48+06
2869.833	19913−54748	UV142	2−1	−.51	2.95	3.08−01	6.17−02	2.50+08	8.32+07
2871.730	19788−54600	UV149	4−3	−1.30	2.16	4.98−02	5.54−03	4.03+07	5.76+06
2872.335	7728−42533	UV 43	3−3	−.86	2.60	1.38−01	1.97−02	1.12+08	1.59+07
2873.655	20641−55430	UV158	4−5	−.40	3.06	4.00−01	4.45−02	3.23+08	2.94+07
2874.173	0−34782	UV 2	4−5	−1.55	1.91	2.82−02	3.13−03	2.28+07	2.07+06

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
2875.303	11976−46745	UV 86	4−3	−.77	2.69	1.71−01	1.90−02	1.38+08	1.97+07
2877.302	11976−46721	UV 86	4−4	−.33	3.13	4.70−01	5.22−02	3.78+08	4.21+07
2878.762	22838−57565		2−3	.08	3.54	1.21+00	2.43−01	9.77+08	1.40+08
2878.962	12969−47693	UV 90	2−3	−1.66	1.80	2.18−02	4.36−03	1.75+07	2.50+06
2879.461	19552−54271	UV136	1−1	−1.04	2.42	9.18−02	3.06−02	7.39+07	2.46+07
2880.581	8155−42860	UV 43	1−2	−1.94	1.52	1.15−02	3.83−03	9.23+06	1.85+06
2886.317	12561−47197	UV 87	3−2	−1.27	2.19	5.35−02	7.65−03	4.29+07	8.57+06
2887.360	19390−54014	UV150	6−5	−1.33	2.13	4.72−02	3.63−03	3.78+07	3.43+06
2887.806	21716−56334	UV167	5−6	.27	3.73	1.85+00	1.68−01	1.48+09	1.14+08
2887.961	19621−54237	UV149	5−4	−.80	2.66	1.59−01	1.44−02	1.27+08	1.41+07
2889.890	19390−53983	UV149	6−5	−.58	2.88	2.64−01	2.03−02	2.11+08	1.92+07
2889.991	20020−54612	UV142	1−2	−.43	3.03	3.70−01	1.23−01	2.96+08	5.91+07
2890.414	12969−47556		2−1	−2.23	1.23	5.82−03	1.16−03	4.65+06	1.55+06
2890.868	26225−60807	UV184	3−3	−.10	3.36	8.00−01	1.14−01	6.38+08	9.12+07
2891.410	12561−47136	UV 89	3−2	−1.99	1.47	1.02−02	1.45−03	8.12+06	1.62+06
2891.705	20875−55446	UV158	3−4	.09	3.55	1.24+00	1.77−01	9.90+08	1.10+08
2891.904	19788−54357		4−3	−.59	2.87	2.57−01	2.85−02	2.05+08	2.92+07
2892.479	19562−54125	UV142	4−4	−.30	3.16	5.04−01	5.60−02	4.02+08	4.46+07
2893.763	7986−42533	UV 43	2−3	−1.82	1.64	1.51−02	3.03−03	1.21+07	1.72+06
2893.882	12561−47107	UV 88	3−4	−1.06	2.40	8.65−02	1.24−02	6.89+07	7.66+06
2894.506	18378−52916	UV134	2−2	.59	4.05	3.87+00	7.74−01	3.08+09	6.16+08
2895.036	12561−47093	UV 87	3−3	−.35	3.11	4.44−01	6.34−02	3.53+08	5.04+07
2897.635	19788−54289		4−3	−.39	3.08	4.11−01	4.57−02	3.27+08	4.67+07
2898.867	17727−52213		2−3	−1.17	2.30	6.81−02	1.36−02	5.40+07	7.72+06
2899.416	18378−52858	UV133	2−1	.32	3.79	2.11+00	4.22−01	1.67+09	5.58+08
2901.382	12561−47017	UV 89	3−3	−.65	2.81	2.22−01	3.17−02	1.76+08	2.51+07
2901.910	19351−53801	UV142	5−5	.22	3.68	1.65+00	1.50−01	1.31+09	1.19+08
2905.570	26351−60758	UV182	5−4	.40	3.86	2.50+00	2.27−01	1.98+09	2.20+08
2907.518	21999−56383	UV167	4−5	.57	4.03	3.73+00	4.14−01	2.94+09	2.67+08
2908.864	19757−54125	UV142	3−4	−.24	3.23	5.78−01	8.26−02	4.56+08	5.06+07
2909.313	19621−53983	UV149	5−5	−1.08	2.39	8.35−02	7.59−03	6.58+07	5.98+06
2910.930	22249−56593	UV168	3−4	−.45	3.01	3.54−01	5.06−02	2.79+08	3.10+07
2912.159	0−34329	UV 1	4−3	−1.24	2.22	5.75−02	6.39−03	4.53+07	6.47+06
2918.023	26106−60366	UV182	6−6	1.54	5.00	3.46+01	2.66+00	2.71+10	2.09+09
2918.354	19552−53808	UV134	1−1	−.11	3.35	7.75−01	2.58−01	6.07+08	2.02+08
2919.838	19562−53801	UV142	4−5	−.30	3.16	5.00−01	5.55−02	3.91+08	3.55+07
2920.290	20038−54271	UV136	0−1	−1.16	2.31	6.96−02	6.96−02	5.45+07	1.82+07
2920.691	12969−47197	UV 87	2−2	−.42	3.04	3.79−01	7.58−02	2.96+08	5.93+07
2922.383	12969−47177	UV 86	2−1	−1.56	1.90	2.74−02	5.49−03	2.14+07	7.14+06
2922.620	17550−51756	UV122	3−2	−.68	2.78	2.07−01	2.96−02	1.62+08	3.23+07
2923.288	26351−60549	UV182	5−5	1.37	4.83	2.33+01	2.12+00	1.82+10	1.65+09
2923.851	21716−55907	UV166	5−5	.74	4.21	5.51+00	5.01−01	4.30+09	3.91+08
2924.002	21716−55906	UV166	5−4	.76	4.23	5.77+00	5.25−01	4.50+09	5.00+08
2925.359	22249−56423	UV167	3−4	.48	3.95	3.05+00	4.36−01	2.38+09	2.64+08
2925.901	12969−47136	UV 89	2−2	−.84	2.62	1.44−01	2.87−02	1.12+08	2.24+07
2928.105	17550−51692	UV121	3−3	−.90	2.57	1.26−01	1.81−02	9.84+07	1.41+07
2929.008	416−34547	UV 1	3−2	−1.12	2.35	7.59−02	1.08−02	5.90+07	1.18+07
2929.118	26628−60758	UV182	4−4	1.09	4.55	1.23+01	1.36+00	9.52+09	1.06+09
2929.620	12969−47093	UV 87	2−3	−1.24	2.22	5.71−02	1.14−02	4.44+07	6.34+06
2930.590	20020−54132	UV141	1−1	−1.62	1.85	2.41−02	8.05−03	1.87+07	6.25+06
2931.420	19788−53892	UV148	4−3	−.83	2.63	1.46−01	1.63−02	1.14+08	1.62+07
2931.803	21999−56098	UV166	4−3	−.45	3.01	3.53−01	3.92−02	2.74+08	3.91+07
2934.370	17550−51619	UV117	3−3	−1.21	2.26	6.13−02	8.76−03	4.75+07	6.79+06
2936.120	12969−47017	UV 89	2−3	−1.21	2.25	6.11−02	1.22−02	4.72+07	6.75+06
2936.905	0−34040	UV 1	4−4	−.60	2.87	2.51−01	2.79−02	1.94+08	2.16+07
2937.806	17727−51756	UV122	2−2	−.16	3.30	6.85−01	1.37−01	5.29+08	1.06+08
2939.072	17927−51942	UV118	1−0	−.59	2.87	2.55−01	8.50−02	1.97+08	1.97+08
2940.586	22846−56843	UV173	5−4	.15	3.62	1.41+00	1.29−01	1.09+09	1.21+08
2941.344	704−34692	UV 1	2−1	−1.31	2.16	4.90−02	9.80−03	3.78+07	1.26+07
2941.770	19562−53546	UV141	4−3	−.52	2.95	3.02−01	3.36−02	2.33+08	3.33+07
2945.050	19788−53734		4−3	−.18	3.29	6.67−01	7.41−02	5.13+08	7.32+07
2945.870	26628−60564		4−3	−.49	2.98	3.23−01	3.59−02	2.48+08	3.54+07
2946.095	12969−46902		2−1	−2.26	1.21	5.55−03	1.11−03	4.26+06	1.42+06
2947.116	26628−60549	UV182	4−5	1.14	4.61	1.37+01	1.52+00	1.05+10	9.58+08
2947.363	18378−52297	UV131	2−2	−.16	3.31	6.89−01	1.38−01	5.29+08	1.06+08
2947.877	416−34329	UV 1	3−3	−.43	3.04	3.72−01	5.31−02	2.85+08	4.07+07
2948.433	21999−55906	UV166	4−4	.72	4.19	5.26+00	5.85−01	4.04+09	4.49+08
2948.733	17727−51630	UV118	2−2	−.82	2.65	1.51−01	3.02−02	1.16+08	2.31+07
2949.688	17727−51619	UV117	2−3	−1.37	2.10	4.24−02	8.49−03	3.25+07	4.65+06
2950.240	17550−51436	UV120	3−3	−.12	3.35	7.54−01	1.08−01	5.78+08	8.26+07

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
2951.356	19788−53661		4−3	−.97	2.50	1.07−01	1.19−02	8.18+07	1.17+07
2953.486	22249−56098	UV166	3−3	.73	4.20	5.34+00	7.62−01	4.08+09	5.83+08
2953.941	704−34547	10	2−2	−.61	2.86	2.45−01	4.91−02	1.88+08	3.75+07
2954.654	18378−52213	UV132	2−3	−.03	3.44	9.40−01	1.88−01	7.18+08	1.03+08
2956.710	17550−51361	UV118	3−3	−.85	2.62	1.42−01	2.03−02	1.09+08	1.55+07
2956.860	21716−55526	UV165	5−5	−.28	3.19	5.25−01	4.77−02	4.01+08	3.64+07
2957.366	888−34692	10	1−1	−.77	2.70	1.70−01	5.66−02	1.30+08	4.32+07
2958.462	21999−55791	317	4−3	−.93	2.54	1.18−01	1.31−02	8.99+07	1.28+07
2959.682	22650−56428	UV172	6−5	.50	3.98	3.20+00	2.46−01	2.44+09	2.21+08
2959.993	21716−55490	316	5−6	1.10	4.57	1.25+01	1.14+00	9.53+09	7.33+08
2960.299	20038−53808	148	0−1	−.03	3.44	9.31−01	9.31−01	7.09+08	2.36+08
2960.666	23784−57550	UV178	5−4	−.02	3.45	9.62−01	8.74−02	7.32+08	8.13+07
2961.700	17550−51305	UV119	3−4	−2.14	1.33	7.25−03	1.04−03	5.51+06	6.12+05
2962.110	11976−45726	57	4−5	−2.02	1.45	9.55−03	1.06−03	7.26+06	6.60+05
2963.710	23111−56843	UV173	3−4	−.69	2.78	2.04−01	2.92−02	1.55+08	1.73+07
2964.196	20875−54600		3−3	−.81	2.66	1.54−01	2.20−02	1.17+08	1.67+07
2965.256	978−34692	10	0−1	−.99	2.48	1.02−01	1.02−01	7.76+07	2.59+07
2965.811	19621−53329	UV147	5−4	−.21	3.26	6.10−01	5.55−02	4.63+08	5.14+07
2966.260	17927−51630	104	1−2	−.69	2.78	2.03−01	6.78−02	1.54+08	3.08+07
2966.900	0−33695	10	4−5	−.21	3.26	6.17−01	6.85−02	4.67+08	4.25+07
2968.481	19552−53230	UV135	1−1	−.40	3.07	3.97−01	1.32−01	3.01+08	1.00+08
2969.361	888−34556	11	1−0	−1.73	1.74	1.86−02	6.21−03	1.41+07	1.41+07
2969.476	6928−40594	30	5−4	−.73	2.74	1.86−01	1.69−02	1.41+08	1.57+07
2970.106	888−34547	10	1−2	−.72	2.75	1.91−01	6.35−02	1.44+08	2.88+07
2972.277	17727−51361	104	2−3	−.43	3.05	3.74−01	7.49−02	2.83+08	4.04+07
2973.134	704−34329	10	2−3	−.54	2.93	2.88−01	5.77−02	2.18+08	3.11+07
2973.237	416−34040	10	3−4	−.34	3.13	4.57−01	6.53−02	3.45+08	3.83+07
2974.780	22846−56452	335	5−4	−.43	3.04	3.69−01	3.35−02	2.78+08	3.09+07
2975.655	20641−54237		4−4	−.21	3.26	6.17−01	6.86−02	4.65+08	5.17+07
2976.126	18378−51969	146	2−3	−.05	3.42	8.88−01	1.78−01	6.68+08	9.55+07
2976.550	11976−45563	56	4−3	−1.74	1.73	1.82−02	2.02−03	1.37+07	1.96+06
2976.922	22846−56428	334	5−5	−.54	2.94	2.92−01	2.65−02	2.20+08	2.00+07
2978.060	19788−53358		4−3	−1.11	2.36	7.72−02	8.58−03	5.81+07	8.29+06
2980.532	22249−55791	317	3−3	.41	3.89	2.58+00	3.69−01	1.94+09	2.77+08
2981.446	416−33947	11	3−2	−1.03	2.44	9.33−02	1.33−02	7.00+07	1.40+07
2982.234	24119−57641	460	4−3	−.36	3.12	4.38−01	4.86−02	3.28+08	4.69+07
2983.571	0−33507	9	4−3	−.36	3.11	4.37−01	4.85−02	3.27+08	4.67+07
2984.785	6928−40422	29	5−4	−.75	2.72	1.78−01	1.62−02	1.33+08	1.48+07
2986.457	888−34363	11	1−1	−2.22	1.26	6.03−03	2.01−03	4.51+06	1.50+06
2986.653	19621−53094	200	5−6	−.63	2.84	2.34−01	2.13−02	1.75+08	1.35+07
2987.292	7377−40842	30	4−3	−.56	2.92	2.75−01	3.06−02	2.06+08	2.94+07
2988.473	11976−45428	56	4−4	−1.40	2.08	3.98−02	4.42−03	2.97+07	3.30+06
2988.942	21999−55446	316	4−4	−.82	2.66	1.53−01	1.70−02	1.14+08	1.27+07
2990.393	21999−55430	316	4−5	.89	4.37	7.81+00	8.67−01	5.82+09	5.29+08
2994.428	416−33802	9	3−2	−.35	3.13	4.47−01	6.38−02	3.32+08	6.65+07
2994.503	978−34363	11	0−1	−.23	3.25	5.89−01	5.89−01	4.38+08	1.46+08
2995.838	24339−57709	460	3−2	−.67	2.80	2.12−01	3.04−02	1.58+08	3.16+07
2996.386	19552−52916	148	1−2	.12	3.59	1.31+00	4.37−01	9.74+08	1.95+08
2999.512	6928−40257	30	5−5	−.06	3.42	8.71−01	7.92−02	6.46+08	5.87+07
3000.453	11976−45295	56	4−5	−.32	3.16	4.79−01	5.32−02	3.55+08	3.22+07
3000.949	704−34017	9	2−1	−.36	3.12	4.37−01	8.73−02	3.23+08	1.08+08
3001.663	24336−57641	506	2−3	−.23	3.25	5.90−01	1.18−01	4.37+08	6.24+07
3003.032	7728−41018	30	3−2	−.54	2.94	2.88−01	4.12−02	2.13+08	4.27+07
3004.119	19621−52899	199	5−5	−.31	3.16	4.86−01	4.42−02	3.59+08	3.27+07
3004.620	12561−45833	57	3−4	−1.87	1.61	1.35−02	1.93−03	9.97+06	1.11+06
3005.302	19390−52655	199	6−7	−.05	3.43	8.93−01	6.87−02	6.59+08	4.40+07
3006.598	20641−53892		4−3	−.88	2.59	1.30−01	1.45−02	9.62+07	1.37+07
3007.147	11976−45221	55	4−3	−.35	3.13	4.47−01	4.96−02	3.29+08	4.71+07
3007.283	704−33947	11	2−2	−1.30	2.18	5.01−02	1.00−02	3.70+07	7.39+06
3008.140	888−34122	9	1−0	−.51	2.97	3.09−01	1.03−01	2.28+08	2.28+08
3009.094	19390−52613	198	6−5	.16	3.64	1.44+00	1.11−01	1.06+09	9.64+07
3009.571	7377−40594	30	4−4	−.15	3.33	7.08−01	7.87−02	5.21+08	5.79+07
3011.482	22249−55446	316	3−4	.97	4.45	9.41+00	1.34+00	6.92+09	7.69+08
3011.883	20038−53230	UV135	0−1	−.65	2.83	2.23−01	2.23−01	1.64+08	5.47+07
3014.175	7728−40895	31	3−2	−1.69	1.79	2.04−02	2.92−03	1.50+07	3.00+06
3015.913	19621−52769	198	5−4	.06	3.54	1.14+00	1.04−01	8.38+08	9.32+07
3016.186	7986−41131	30	2−1	−.68	2.80	2.09−01	4.18−02	1.53+08	5.11+07
3017.629	888−34017	9	1−1	−1.17	2.31	6.76−02	2.25−02	4.95+07	1.65+07
3018.134	19390−52514	199	6−6	−.61	2.87	2.46−01	1.90−02	1.80+08	1.39+07
3018.985	7728−40842	30	3−3	−.30	3.18	5.01−01	7.16−02	3.67+08	5.24+07

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3019.290	19788–52899	199	4–5	.02	3.50	1.04+00	1.15–01	7.60+08	6.91+07
3020.640	0–33096	9	4–4	–.13	3.35	7.41–01	8.24–02	5.42+08	6.02+07
3021.074	416–33507	9	3–3	–.19	3.29	6.46–01	9.22–02	4.72+08	6.74+07
3024.034	888–33947	11	1–2	–1.09	2.39	8.13–02	2.71–02	5.93+07	1.19+07
3025.283	7377–40422	29	4–4	–1.68	1.80	2.09–02	2.32–03	1.52+07	1.69+06
3025.638	19390–52431	198	6–6	1.02	4.50	1.04+01	7.99–01	7.57+09	5.82+08
3025.844	978–34017	9	0–1	–.57	2.91	2.69–01	2.69–01	1.96+08	6.54+07
3026.464	7986–41018	30	2–2	–.45	3.03	3.55–01	7.10–02	2.58+08	5.17+07
3029.235	12561–45563	56	3–3	–1.12	2.36	7.59–02	1.08–02	5.51+07	7.88+06
3030.149	19621–52613	198	5–5	1.05	4.53	1.12+01	1.02+00	8.11+09	7.38+08
3030.605	18378–51365	145	2–3	–1.22	2.27	6.08–02	1.22–02	4.41+07	6.30+06
3031.213	19788–52769	198	4–4	.96	4.44	9.08+00	1.01+00	6.59+09	7.32+08
3031.638	8155–41131	30	1–1	–.46	3.02	3.47–01	1.16–01	2.52+08	8.39+07
3033.101	19552–52512	146	1–1	–.47	3.01	3.40–01	1.13–01	2.47+08	8.22+07
3034.510	12969–45914	57	2–3	–1.30	2.18	5.01–02	1.00–02	3.63+07	5.19+06
3037.390	888–33802	9	1–2	–.43	3.05	3.72–01	1.24–01	2.69+08	5.37+07
3037.781	7986–40895	31	2–2	–1.68	1.80	2.09–02	4.18–03	1.51+07	3.02+06
3039.322	19621–52514	199	5–6	–.55	2.93	2.83–01	2.57–02	2.04+08	1.57+07
3040.428	7377–40257	30	4–5	–.63	2.85	2.34–01	2.60–02	1.69+08	1.54+07
3041.639	12561–45428	56	3–4	–.33	3.15	4.68–01	6.68–02	3.37+08	3.75+07
3041.740	7728–40594	30	3–4	–.53	2.95	2.95–01	4.22–02	2.13+08	2.36+07
3042.022	8155–41018	30	1–2	–.77	2.71	1.70–01	5.66–02	1.22+08	2.45+07
3042.667	7986–40842	30	2–3	–.48	3.00	3.31–01	6.62–02	2.39+08	3.41+07
3045.077	7377–40207	29	4–3	–1.20	2.28	6.31–02	7.01–03	4.54+07	6.48+06
3045.594	19788–52613	198	4–5	–.47	3.01	3.37–01	3.75–02	2.43+08	2.21+07
3046.930	19621–52431	198	5–6	–.42	3.06	3.77–01	3.43–02	2.71+08	2.08+07
3047.050	23784–56593	457	5–4	.29	3.77	1.95+00	1.77–01	1.40+09	1.55+08
3047.606	704–33507	9	2–3	–.33	3.15	4.68–01	9.35–02	3.36+08	4.80+07
3053.065	19552–52297	146	1–2	.27	3.75	1.85+00	6.18–01	1.33+09	2.65+08
3053.440	8155–40895	31	1–2	–1.67	1.81	2.14–02	7.13–03	1.53+07	3.06+06
3055.264	12561–45282	55	3–2	–.25	3.24	5.62–01	8.03–02	4.02+08	8.04+07
3056.250	21039–53749		2–2	–.42	3.07	3.85–01	7.69–02	2.75+08	5.49+07
3057.447	6928–39626	28	5–4	.14	3.63	1.38+00	1.25–01	9.85+08	1.09+08
3057.802	7728–40422	29	3–4	–1.92	1.57	1.20–02	1.72–03	8.58+06	9.53+05
3059.087	416–33096	9	3–4	–.44	3.05	3.63–01	5.19–02	2.59+08	2.88+07
3060.545	24119–56783	457	4–3	.15	3.63	1.40+00	1.55–01	9.95+08	1.42+08
3060.985	12561–45221	55	3–3	–1.05	2.44	8.91–02	1.27–02	6.34+07	9.06+06
3062.872	23784–56423	456	5–4	–.48	3.01	3.35–01	3.04–02	2.38+08	2.64+07
3063.149	17550–50187	102	3–2	–1.76	1.73	1.75–02	2.51–03	1.25+07	2.49+06
3063.933	19552–52481	147	1–1	–.16	3.33	6.93–01	2.31–01	4.93+08	1.64+08
3066.483	21999–54600	313	4–3	.25	3.73	1.77+00	1.97–01	1.25+09	1.79+08
3067.246	7377–39970	28	4–3	.00	3.49	1.00+00	1.11–01	7.09+08	1.01+08
3067.952	21716–54301	315a	5–4	.09	3.57	1.22+00	1.11–01	8.62+08	9.58+07
3068.175	12969–45552	55	2–1	–.31	3.18	4.90–01	9.80–02	3.47+08	1.16+08
3073.244	24575–57104	549	4–5	–.60	2.89	2.53–01	2.81–02	1.79+08	1.63+07
3073.982	21716–54237	313	5–4	–.14	3.35	7.25–01	6.59–02	5.12+08	5.69+07
3074.157	24339–56859	457	3–2	.06	3.55	1.15+00	1.65–01	8.14+08	1.63+08
3075.721	7728–40231	28	3–2	–.15	3.34	7.08–01	1.01–01	4.99+08	9.98+07
3078.014	7728–40207	29	3–3	–1.39	2.10	4.07–02	5.82–03	2.87+07	4.10+06
3078.436	20038–52512	146	0–1	.27	3.76	1.87+00	1.87+00	1.32+09	4.39+08
3081.278	24339–56783	457	3–3	–.79	2.69	1.60–01	2.29–02	1.13+08	1.61+07
3081.832	11976–44415	53	4–4	–1.82	1.67	1.51–02	1.68–03	1.06+07	1.18+06
3083.152	19788–52213	197	4–3	–.70	2.79	2.01–01	2.23–02	1.41+08	2.01+07
3083.743	7986–40405	28	2–1	–.22	3.27	6.03–01	1.21–01	4.23+08	1.41+08
3087.420	26140–58520		3–4	.21	3.70	1.63+00	2.33–01	1.14+09	1.27+08
3090.209	22249–54600	313	3–3	–.16	3.33	6.88–01	9.83–02	4.81+08	6.87+07
3091.579	8155–40491	28	1–0	–.40	3.09	3.98–01	1.33–01	2.78+08	2.78+08
3092.778	7728–40052	29	3–2	–1.90	1.59	1.26–02	1.80–03	8.78+06	1.76+06
3094.870	21999–54301	315a	4–4	–.30	3.19	4.96–01	5.51–02	3.45+08	3.83+07
3095.270	21716–54014	314	5–5	–.31	3.18	4.94–01	4.49–02	3.44+08	3.13+07
3096.044	21999–54289		4–3	–.76	2.74	1.75–01	1.95–02	1.22+08	1.74+07
3098.192	21716–53983	313	5–5	.48	3.97	3.03+00	2.76–01	2.11+09	1.92+08
3098.963	17927–50187	102	1–2	–1.28	2.22	5.30–02	1.77–02	3.68+07	7.36+06
3099.897	8155–40405	28	1–1	–.04	3.45	9.12–01	3.04–01	6.33+08	2.11+08
3099.970	7377–39626	28	4–4	–.27	3.22	5.37–01	5.97–02	3.73+08	4.14+07
3100.305	7986–40231	28	2–2	–.24	3.25	5.75–01	1.15–01	3.99+08	7.99+07
3100.667	7728–39970	28	3–3	–.20	3.29	6.31–01	9.01–02	4.38+08	6.25+07
3100.838	19390–51630	196	6–5	–.21	3.28	6.14–01	4.73–02	4.26+08	3.87+07
3101.004	21999–54237	313	4–4	–.54	2.95	2.89–01	3.21–02	2.00+08	2.22+07
3102.644	7986–40207	29	2–3	–2.10	1.39	7.94–03	1.59–03	5.50+06	7.86+05

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3103.760	19552−51762		1−2	−1.14	2.35	7.18−02	2.39−02	4.97+07	9.94+06
3107.978	21716−53882		5−4	−.42	3.08	3.84−01	3.49−02	2.65+08	2.95+07
3109.050	19913−52067	165	2−2	−1.17	2.33	6.83−02	1.37−02	4.71+07	9.42+06
3111.686	20641−52769	260	4−4	−.55	2.94	2.81−01	3.12−02	1.93+08	2.15+07
3112.079	23784−55907	455	5−5	.61	4.10	4.09+00	3.71−01	2.81+09	2.56+08
3113.592	22249−54357		3−3	−.06	3.43	8.70−01	1.24−01	5.98+08	8.55+07
3114.054	12561−44664	53	3−2	−2.55	.94	2.82−03	4.03−04	1.94+06	3.88+05
3115.656	24772−56859		1−2	−.63	2.87	2.36−01	7.85−02	1.62+08	3.24+07
3115.862	24339−56423	456	3−4	−.96	2.54	1.11−01	1.58−02	7.61+07	8.46+06
3116.250	19757−51837	165	3−3	−.78	2.71	1.66−01	2.37−02	1.14+08	1.63+07
3116.634	8155−40231	28	1−2	−.82	2.67	1.51−01	5.05−02	1.04+08	2.08+07
3116.984	26140−58213	578a	3−2	−.57	2.93	2.71−01	3.87−02	1.86+08	3.72+07
3117.640	7986−40052	29	2−2	−2.18	1.31	6.61−03	1.32−03	4.53+06	9.07+05
3119.496	19621−51668	194	5−4	.23	3.72	1.70+00	1.55−01	1.17+09	1.30+08
3120.220	22249−54289		3−3	−.49	3.01	3.27−01	4.67−02	2.24+08	3.20+07
3120.436	19788−51826	194	4−3	.18	3.67	1.51+00	1.68−01	1.04+09	1.48+08
3121.760	17927−49951	102	1−0	−1.11	2.39	7.82−02	2.61−02	5.35+07	5.35+07
3123.353	19562−51570	164	4−3	−.71	2.78	1.93−01	2.14−02	1.32+08	1.88+07
3123.545	21999−54005		4−3	−.90	2.60	1.27−01	1.41−02	8.67+07	1.24+07
3124.099	20020−52020	165	1−1	−1.09	2.41	8.15−02	2.72−02	5.57+07	1.86+07
3125.653	7986−39970	28	2−3	−.76	2.73	1.74−01	3.48−02	1.19+08	1.69+07
3128.901	12561−44512	54	3−2	−1.47	2.03	3.39−02	4.84−03	2.31+07	4.62+06
3129.178	19757−51705	161	3−2	−.55	2.95	2.84−01	4.05−02	1.93+08	3.86+07
3132.514	25900−57814	578	4−3	.63	4.12	4.23+00	4.70−01	2.88+09	4.11+08
3134.112	7728−39626	28	3−4	−1.12	2.38	7.59−02	1.08−02	5.15+07	5.72+06
3135.590	21999−53882		4−4	−.61	2.89	2.48−01	2.76−02	1.68+08	1.87+07
3135.863	19788−51668	194	4−4	−.80	2.70	1.59−01	1.76−02	1.08+08	1.20+07
3139.661	19351−51192	155	5−4	−.64	2.86	2.31−01	2.10−02	1.56+08	1.74+07
3140.391	26140−57974	578	3−2	.71	4.21	5.14+00	7.35−01	3.48+09	6.96+08
3142.453	19757−51570	164	3−3	−.00	3.49	9.89−01	1.41−01	6.68+08	9.54+07
3142.891	18378−50187	144	2−2	−.17	3.33	6.82−01	1.36−01	4.61+08	9.21+07
3143.243	0−31805	7	4−3	−3.20	.30	6.31−04	7.01−05	4.26+05	6.09+04
3143.990	25900−57698	578	4−4	.96	4.45	9.04+00	1.00+00	6.10+09	6.78+08
3144.488	19913−51705	161	2−2	−.11	3.39	7.81−01	1.56−01	5.27+08	1.05+08
3144.924	19621−51409	195	5−4	−1.30	2.19	4.97−02	4.51−03	3.35+07	3.72+06
3145.057	24119−55906	455	4−4	.26	3.76	1.83+00	2.03−01	1.23+09	1.37+08
3146.475	19562−51335	160	4−4	−1.35	2.15	4.49−02	4.98−03	3.02+07	3.36+06
3147.793	24339−56098	455	3−3	.14	3.64	1.37+00	1.96−01	9.23+08	1.32+08
3148.178	22249−54005		3−3	−.90	2.60	1.27−01	1.81−02	8.54+07	1.22+07
3148.408	19621−51374	194	5−5	−.40	3.10	4.02−01	3.65−02	2.70+08	2.46+07
3149.492	23784−55526	453	5−5	−1.05	2.45	8.92−02	8.11−03	6.00+07	5.45+06
3150.304	26479−58213	578a	1−2	.55	4.05	3.57+00	1.19+00	2.40+09	4.80+08
3151.353	21999−53722	311	4−5	.73	4.23	5.41+00	6.01−01	3.63+09	3.30+08
3151.867	416−32134	7	3−2	−2.91	.59	1.23−03	1.76−04	8.26+05	1.65+05
3153.200	19757−51462	161	3−4	.18	3.68	1.51+00	2.16−01	1.01+09	1.13+08
3154.505	19913−51604	161	2−3	−.07	3.43	8.45−01	1.69−01	5.67+08	8.09+07
3155.134	20020−51705	161	1−2	−1.09	2.41	8.18−02	2.73−02	5.48+07	1.10+07
3155.293	19621−51305	193	5−4	−.40	3.10	3.98−01	3.62−02	2.67+08	2.97+07
3155.796	19390−51069	192a	6−5	−1.21	2.29	6.13−02	4.72−03	4.11+07	3.73+06
3156.275	26140−57814	578	3−3	.89	4.39	7.71+00	1.10+00	5.16+09	7.37+08
3156.464	24119−55791	454	4−3	−.02	3.48	9.59−01	1.07−01	6.42+08	9.17+07
3157.040	19562−51229	160	4−5	.36	3.86	2.27+00	2.52−01	1.52+09	1.38+08
3157.880	19913−51570	164	2−3	.23	3.72	1.68+00	3.36−01	1.12+09	1.60+08
3158.990	23784−55430	452	5−5	−.46	3.04	3.49−01	3.17−02	2.33+08	2.12+07
3159.248	21039−52683	259	2−2	−1.20	2.30	6.35−02	1.27−02	4.24+07	8.48+06
3159.437	22249−53892		3−3	−1.06	2.43	8.61−02	1.23−02	5.76+07	8.22+06
3160.200	26340−57974	578	2−2	.61	4.11	4.09+00	8.17−01	2.73+09	5.46+08
3160.344	19390−51023	192a	6−6	−.16	3.33	6.84−01	5.26−02	4.57+08	3.51+07
3160.658	19562−51192	155	4−4	.43	3.93	2.72+00	3.02−01	1.81+09	2.02+08
3161.558	19788−51409	195	4−4	−1.09	2.41	8.05−02	8.95−03	5.37+07	5.97+06
3161.949	19351−50968	160	5−6	.20	3.70	1.59+00	1.45−01	1.06+09	8.18+07
3162.335	19757−51370	159	3−2	−.39	3.11	4.11−01	5.87−02	2.74+08	5.48+07
3164.308	19757−51351	163	3−4	−.58	2.92	2.65−01	3.78−02	1.76+08	1.96+07
3165.005	19562−51149	155	4−3	− 22	3.28	6.05−01	6.72−02	4.03+08	5.76+07
3165.860	19757−51335	160	3−4	.01	3.51	1.03+00	1.47−01	6.84+08	7.60+07
3166.435	20641−52213	259	4−3	.42	3.92	2.65+00	2.94−01	1.76+09	2.52+08
3166.596	17727−49298	100	2−1	.05	3.55	1.11+00	2.23−01	7.41+08	2.47+08
3166.982	24339−55906	455	3−4	−1.04	2.46	9.15−02	1.31−02	6.08+07	6.76+06
3167.907	26140−57698	578	3−4	.76	4.26	5.71+00	8.15−01	3.79+09	4.21+08
3168.858	19913−51461	160	2−3	−.16	3.34	6.90−01	1.38−01	4.58+08	6.55+07

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3171.353	11976-43500	52	4-4	-.86	2.64	1.38-01	1.53-02	9.15+07	1.02+07
3171.663	20020-51540	160	1-2	-.43	3.07	3.74-01	1.25-01	2.48+08	4.96+07
3172.067	17727-49243	99	2-3	-.55	2.96	2.85-01	5.70-02	1.89+08	2.70+07
3172.292	22249-53763	312	3-3	-.96	2.54	1.09-01	1.55-02	7.20+07	1.03+07
3173.400	23245-54748	333	1-1	-.17	3.33	6.74-01	2.25-01	4.47+08	1.49+08
3173.663	17727-49227	101	2-3	-.47	3.04	3.42-01	6.84-02	2.26+08	3.24+07
3174.222	26479-57974	578	1-2	-.80	2.70	1.59-01	5.30-02	1.05+08	2.10+07
3175.447	19351-50833	155	5-5	.45	3.95	2.79+00	2.53-01	1.84+09	1.68+08
3175.970	23270-54748	333	0-1	-.49	3.01	3.23-01	3.23-01	2.13+08	7.12+07
3176.366	21039-52512	258	2-1	-.18	3.32	6.63-01	1.33-01	4.38+08	1.46+08
3178.015	19351-50808	156	5-4	.30	3.81	2.01+00	1.83-01	1.33+09	1.48+08
3178.545	24339-55791	454	3-3	.13	3.63	1.35+00	1.94-01	8.94+08	1.28+08
3178.967	19621-51069	192a	5-5	-.28	3.22	5.22-01	4.74-02	3.44+08	3.13+07
3179.479	12969-44411	52	2-1	-1.14	2.36	7.24-02	1.45-02	4.78+07	1.59+07
3180.223	19757-51192	155	3-4	.83	4.34	6.83+00	9.75-01	4.50+09	5.00+08
3180.756	704-32134	7	2-2	-2.26	1.24	5.50-03	1.10-03	3.62+06	7.25+05
3181.522	20875-52297	258	3-2	.21	3.71	1.61+00	2.31-01	1.06+09	2.13+08
3181.922	24336-55754	505	2-2	.14	3.64	1.38+00	2.75-01	9.07+08	1.81+08
3182.060	19562-50980	159	4-4	-.19	3.32	6.50-01	7.22-02	4.28+08	4.76+07
3182.980	17727-49135	100	2-3	-.20	3.30	6.32-01	1.26-01	4.16+08	5.94+07
3183.582	19621-51023	192a	5-6	-1.08	2.42	8.22-02	7.48-03	5.41+07	4.16+06
3184.112	26875-58272	711	5-5	-.04	3.46	9.09-01	8.27-02	5.98+08	5.44+07
3184.622	19757-51149	155	3-3	-.33	3.17	4.70-01	6.71-02	3.09+08	4.41+07
3184.896	416-31805	7	3-3	-2.00	1.50	1.00-02	1.43-03	6.58+06	9.39+05
3187.171	23245-54612	333	1-2	-.58	2.92	2.62-01	8.74-02	1.72+08	3.44+07
3188.026	21999-53358		4-3	-.35	3.15	4.44-01	4.94-02	2.92+08	4.16+07
3188.567	19351-50704	159	5-5	-.09	3.41	8.10-01	7.37-02	5.32+08	4.83+07
3188.819	20020-51370	159	1-2	.27	3.78	1.88+00	6.26-01	1.23+09	2.46+08
3190.020	20875-52213	259	3-3	-.45	3.06	3.57-01	5.10-02	2.34+08	3.35+07
3190.651	24575-55907	548	4-5	.32	3.83	2.10+00	2.33-01	1.37+09	1.25+08
3190.816	24575-55906	548	4-4	.39	3.90	2.46+00	2.74-01	1.61+09	1.79+08
3191.116	20641-51969	258	4-3	-.53	2.97	2.94-01	3.27-02	1.93+08	2.75+07
3191.660	0-31323	8	4-3	-2.00	1.50	1.00-02	1.11-03	6.55+06	9.35+05
3192.417	17927-49243	100	1-2	-.91	2.60	1.24-01	4.14-02	8.14+07	1.63+07
3192.799	20020-51331	155	1-2	.61	4.12	4.09+00	1.36+00	2.68+09	5.35+08
3193.227	0-31307	7	4-4	-1.73	1.77	1.86-02	2.07-03	1.22+07	1.35+06
3193.303	19913-51219	159	2-3	.62	4.12	4.13+00	8.25-01	2.70+09	3.86+08
3194.422	19913-51208	155	2-1	-.07	3.44	8.61-01	1.72-01	5.63+08	1.88+08
3196.147	22846-54125	333	5-4	.51	4.02	3.25+00	2.96-01	2.12+09	2.36+08
3196.930	19562-50833	155	4-5	1.06	4.56	1.14+01	1.26+00	7.41+09	6.74+08
3197.521	27560-58825	711	2-2	.30	3.81	2.00+00	3.99-01	1.30+09	2.60+08
3198.266	21039-52297	258	2-2	-.82	2.68	1.51-01	3.01-02	9.83+07	1.97+07
3199.530	19562-50808	156	4-4	.69	4.20	4.94+00	5.49-01	3.22+09	3.58+08
3200.475	19913-51149	155	2-3	.80	4.31	6.34+00	1.27+00	4.13+09	5.89+08
3200.785	704-31937	8	2-1	-2.81	.70	1.55-03	3.10-04	1.01+06	3.36+05
3202.562	24575-55791	547	4-3	.41	3.92	2.58+00	2.87-01	1.68+09	2.40+08
3205.400	20020-51208	155	1-1	.74	4.25	5.56+00	1.85+00	3.61+09	1.20+09
3207.089	19351-50523	159	5-6	-.49	3.02	3.23-01	2.94-02	2.10+08	1.61+07
3207.649	22838-54005	382	2-3	-1.20	2.31	6.36-02	1.27-02	4.12+07	5.89+06
3210.230	19562-50704	159	4-5	.37	3.88	2.34+00	2.60-01	1.51+09	1.38+08
3210.830	19913-51048	156	2-1	.65	4.15	4.43+00	8.86-01	2.87+09	9.55+08
3211.487	20020-51149	162	1-2	.11	3.62	1.29+00	4.31-01	8.37+08	1.67+08
3211.683	26875-58002	711	5-6	1.55	5.06	3.58+01	3.25+00	2.31+10	1.78+09
3211.872	17927-49053	98	1-2	.03	3.53	1.07+00	3.55-01	6.89+08	1.38+08
3211.989	19351-50475	158	5-4	.83	4.33	6.72+00	6.11-01	4.35+09	4.83+08
3214.044	19757-50862	156	3-3	1.16	4.66	1.43+01	2.05+00	9.26+09	1.32+09
3214.396	704-31805	7	2-3	-1.82	1.69	1.51-02	3.03-03	9.77+06	1.40+06
3214.624	18378-49477	143	2-2	-1.32	2.19	4.83-02	9.65-03	3.12+07	6.23+06
3215.940	19913-50999	156	2-2	.69	4.20	4.94+00	9.88-01	3.19+09	6.37+08
3217.380	19351-50423	157	5-4	.46	3.97	2.92+00	2.65-01	1.88+09	2.09+08
3219.581	19757-50808	156	3-4	.80	4.31	6.37+00	9.10-01	4.10+09	4.55+08
3219.806	19562-50611	158	4-3	.57	4.08	3.75+00	4.17-01	2.41+09	3.45+08
3221.931	20020-51048	156	1-1	-.84	2.66	1.43-01	4.78-02	9.21+07	3.07+07
3222.069	19351-50378	156	5-5	1.16	4.67	1.45+01	1.32+00	9.35+09	8.50+08
3223.273	11976-42992	51	4-5	-1.89	1.62	1.29-02	1.43-03	8.27+06	7.52+05
3223.480	26628-57641		4-3	-.35	3.16	4.48-01	4.98-02	2.87+08	4.11+07
3223.844	7986-38996	27	2-1	-1.19	2.32	6.46-02	1.29-02	4.14+07	1.38+07
3225.789	19351-50342	155	5-6	1.32	4.83	2.09+01	1.90+00	1.34+10	1.03+09
3226.714	704-31686	8	2-2	-3.28	.23	5.25-04	1.05-04	3.36+05	6.72+04
3227.063	20020-50999	156	1-2	-.24	3.27	5.81-01	1.94-01	3.72+08	7.44+07

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3227.798	19562−50534	157	4−3	.85	4.36	7.09+00	7.87−01	4.54+09	6.48+08
3228.003	22838−53808	379	2−1	.50	4.01	3.16+00	6.31−01	2.02+09	6.73+08
3228.254	19913−50880	157	2−1	.24	3.75	1.73+00	3.46−01	1.11+09	3.69+08
3228.900	20020−50981	157	1−0	−.15	3.36	7.13−01	2.38−01	4.56+08	4.56+08
3229.122	978−31937	8	0−1	−2.28	1.23	5.25−03	5.25−03	3.36+06	1.12+06
3229.595	22846−53801	333	5−5	−.27	3.24	5.35−01	4.87−02	3.42+08	3.11+07
3229.994	24575−55526	546	4−5	.76	4.27	5.76+00	6.40−01	3.68+09	3.35+08
3230.210	19913−50861	158	2−2	.19	3.70	1.54+00	3.07−01	9.83+08	1.97+08
3230.963	19757−50699	157	3−2	.50	4.01	3.15+00	4.50−01	2.01+09	4.03+08
3231.576	11976−42912	50	4−5	−1.57	1.94	2.69−02	2.99−03	1.72+07	1.56+06
3232.155	21039−51969	258	2−3	−1.47	2.04	3.37−02	6.75−03	2.15+07	3.08+06
3233.053	26106−57028	620	6−7	1.43	4.94	2.67+01	2.05+00	1.70+10	1.14+09
3233.967	19562−50475	158	4−4	.52	4.03	3.29+00	3.66−01	2.10+09	2.33+08
3234.614	416−31323	8	3−3	−2.12	1.39	7.59−03	1.08−03	4.84+06	6.91+05
3235.312	21999−52899	309	4−5	−1.68	1.83	2.07−02	2.30−03	1.32+07	1.20+06
3235.592	21716−52613	308	5−5	−1.01	2.50	9.73−02	8.84−03	6.20+07	5.64+06
3235.833	22838−53734		2−3	−1.07	2.44	8.59−02	1.72−02	5.47+07	7.82+06
3236.223	416−31307	7	3−4	−1.88	1.63	1.32−02	1.88−03	8.40+06	9.33+05
3237.234	20875−51756	256	3−2	−1.36	2.15	4.32−02	6.17−03	2.75+07	5.50+06
3238.313	24575−55446	545	4−4	−1.09	2.42	8.20−02	9.11−03	5.22+07	5.79+06
3238.535	24507−55376	397	2−1	−.93	2.58	1.17−01	2.34−02	7.44+07	2.48+07
3239.029	18378−49243	142	2−2	−1.15	2.37	7.15−02	1.43−02	4.55+07	9.10+06
3239.436	19562−50423	157	4−4	.87	4.39	7.50+00	8.33−01	4.77+09	5.30+08
3240.013	24575−55430	545	4−5	−.90	2.61	1.27−01	1.41−02	8.05+07	7.31+06
3240.122	19757−50611	158	3−3	−1.17	2.34	6.83−02	9.75−03	4.34+07	6.19+06
3241.502	8155−38996	27	1−1	−3.26	.25	5.50−04	1.83−04	3.49+05	1.16+05
3242.268	20875−51708	255	3−2	−1.33	2.18	4.71−02	6.73−03	2.99+07	5.98+06
3243.109	19788−50614	192	4−4	−.87	2.65	1.36−01	1.51−02	8.64+07	9.60+06
3243.406	26875−57698	710	5−4	.61	4.12	4.04+00	3.67−01	2.56+09	2.85+08
3244.190	19562−50378	156	4−5	.81	4.32	6.50+00	7.22−01	4.12+09	3.74+08
3246.005	888−31686	8	1−2	−2.08	1.43	8.32−03	2.77−03	5.27+06	1.05+06
3246.482	20875−51668	252	3−4	−.22	3.29	6.03−01	8.62−02	3.82+08	4.24+07
3246.962	17727−48516	95	2−1	−.08	3.43	8.32−01	1.66−01	5.26+08	1.75+08
3247.278	19913−50699	157	2−2	−.06	3.45	8.68−01	1.74−01	5.49+08	1.10+08
3248.206	19757−50534	157	3−3	.38	3.89	2.40+00	3.43−01	1.52+09	2.17+08
3249.037	21999−52769	308	4−4	−1.15	2.36	7.05−02	7.83−03	4.45+07	4.95+06
3249.191	20641−51409	253	4−4	−.38	3.13	4.13−01	4.59−02	2.61+08	2.90+07
3249.504	12561−43326	51	3−3	−2.52	.99	3.02−03	4.31−04	1.91+06	2.73+05
3250.394	23052−53808	379	0−1	−.34	3.17	4.56−01	4.56−01	2.88+08	9.60+07
3250.625	17550−48305	95	3−2	−.44	3.08	3.66−01	5.23−02	2.31+08	4.62+07
3251.236	17727−48476	93	2−3	−.12	3.39	7.56−01	1.51−01	4.77+08	6.82+07
3252.916	20641−51374	252	4−5	−.15	3.37	7.15−01	7.94−02	4.50+08	4.09+07
3253.610	26225−56951	681	3−4	.69	4.20	4.90+00	7.00−01	3.09+09	3.43+08
3253.834	20641−51365	250	4−3	−.70	2.82	2.01−01	2.24−02	1.27+08	1.81+07
3253.949	21039−51762	257	2−2	−.33	3.18	4.63−01	9.27−02	2.92+08	5.84+07
3254.363	26351−57070	620	5−6	1.37	4.88	2.35+01	2.13+00	1.48+10	1.14+09
3254.734	21716−52431	308	5−6	−.81	2.70	1.54−01	1.40−02	9.67+07	7.44+06
3257.244	24119−54811	451	4−4	.13	3.65	1.36+00	1.51−01	8.55+08	9.51+07
3257.594	17550−48239	90	3−2	−.14	3.37	7.27−01	1.04−01	4.57+08	9.14+07
3259.991	19757−50423	157	3−4	−.20	3.32	6.38−01	9.12−02	4.01+08	4.45+07
3260.261	20641−51305	250	4−4	−.33	3.18	4.68−01	5.20−02	2.94+08	3.26+07
3261.332	27560−58213	712	2−2	.41	3.93	2.59+00	5.18−01	1.62+09	3.25+08
3262.009	27167−57814	710	4−3	.50	4.01	3.14+00	3.49−01	1.97+09	2.81+08
3263.370	19552−50187	144	1−2	−.62	2.90	2.42−01	8.07−02	1.52+08	3.03+07
3264.512	17727−48351	90	2−1	−.34	3.18	4.62−01	9.25−02	2.89+08	9.65+07
3264.710	19913−50534	157	2−3	−.67	2.84	2.14−01	4.28−02	1.34+08	1.91+07
3265.047	704−31323	8	2−3	−2.18	1.33	6.61−03	1.32−03	4.13+06	5.91+05
3265.618	17550−48163	91	3−2	.48	3.99	3.02+00	4.31−01	1.89+09	3.78+08
3268.234	17927−48516	95	1−1	−.42	3.09	3.80−01	1.27−01	2.37+08	7.91+07
3269.235	27395−57974	710	3−2	.25	3.77	1.78+00	2.55−01	1.11+09	2.23+08
3269.416	17727−48305	95	2−2	−1.92	1.60	1.21−02	2.42−03	7.57+06	1.51+06
3269.964	17550−48123	90	3−3	−1.65	1.86	2.23−02	3.19−03	1.39+07	1.99+06
3271.001	17727−48290	91	2−1	.50	4.02	3.19+00	6.37−01	1.99+09	6.62+08
3271.487	26225−56783	680	3−3	.17	3.68	1.46+00	2.09−01	9.12+08	1.30+08
3271.684	11976−42533	49	4−3	−1.64	1.87	2.29−02	2.55−03	1.43+07	2.04+06
3272.596	12561−43109	95	3−4	−1.98	1.53	1.05−02	1.50−03	6.52+06	7.25+05
3272.710	27666−58213	712	1−2	−.12	3.40	7.64−01	2.55−01	4.76+08	9.52+07
3274.227	17927−48460	95	1−0	−1.81	1.70	1.54−02	5.14−03	9.60+06	9.60+06
3274.453	27167−57698	710	4−4	.55	4.06	3.52+00	3.91−01	2.19+09	2.43+08
3275.685	22249−52769	308	3−4	−1.08	2.43	8.28−02	1.18−02	5.15+07	5.72+06

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3275.848	23784−54301	450a	5−4	−1.21	2.30	6.10−02	5.54−03	3.79+07	4.21+06
3276.471	17727−48239	90	2−2	−.59	2.93	2.58−01	5.16−02	1.60+08	3.21+07
3278.741	19552−50043	144	1−1	−.37	3.14	4.24−01	1.41−01	2.63+08	8.77+07
3279.739	24119−54600	449	4−3	−.39	3.12	4.05−01	4.50−02	2.51+08	3.59+07
3280.261	26628−57104	620	4−5	1.35	4.87	2.26+01	2.51+00	1.40+10	1.27+09
3280.763	24339−54811	451	3−4	−1.79	1.73	1.64−02	2.34−03	1.01+07	1.13+06
3281.824	12561−43023	50	3−4	−2.38	1.14	4.17−03	5.96−04	2.58+06	2.87+05
3282.720	23784−54237	449	5−4	−1.01	2.51	9.78−02	8.89−03	6.05+07	6.73+06
3282.891	26406−56859	680	1−2	.69	4.21	4.92+00	1.64+00	3.05+09	6.09+08
3283.430	7728−38175	27	3−3	−2.99	.53	1.02−03	1.46−04	6.33+05	9.04+04
3284.589	17727−48163	91	2−2	−.30	3.22	5.01−01	1.00−01	3.10+08	6.19+07
3286.022	17927−48351	90	1−1	−.94	2.58	1.16−01	3.87−02	7.17+07	2.39+07
3286.444	27395−57814	710	3−3	.34	3.85	2.17+00	3.10−01	1.34+09	1.92+08
3286.754	17550−47967	91	3−3	.86	4.38	7.32+00	1.05+00	4.52+09	6.46+08
3287.117	23711−54125	396	4−4	−.24	3.28	5.78−01	6.43−02	3.57+08	3.97+07
3288.651	19552−49951	144	1−0	−.93	2.59	1.18−01	3.95−02	7.30+07	7.30+07
3288.967	17727−48123	90	2−3	−.84	2.68	1.44−01	2.88−02	8.89+07	1.27+07
3289.442	22838−53230	380	2−1	−.59	2.93	2.56−01	5.13−02	1.58+08	5.27+07
3290.714	17550−47930	90	3−4	−1.29	2.23	5.17−02	7.39−03	3.19+07	3.54+06
3290.990	17927−48305	95	1−2	−.21	3.31	6.22−01	2.07−01	3.83+08	7.66+07
3292.022	26225−56593	680	3−4	1.19	4.71	1.55+01	2.21+00	9.51+09	1.06+09
3292.591	17927−48290	91	1−1	.21	3.73	1.63+00	5.45−01	1.01+09	3.35+08
3293.142	12969−43326	51	2−3	−2.06	1.46	8.71−03	1.74−03	5.36+06	7.65+05
3296.467	20875−51201	250	3−2	−.68	2.84	2.11−01	3.02−02	1.30+08	2.59+07
3296.806	26628−56951	619	4−4	−.58	2.94	2.63−01	2.92−02	1.61+08	1.79+07
3298.133	17927−48239	90	1−2	−.10	3.42	7.98−01	2.66−01	4.89+08	9.78+07
3298.537	27666−57974	710	1−2	−.65	2.87	2.25−01	7.49−02	1.38+08	2.75+07
3299.077	27395−57698	710	3−4	−.29	3.22	5.08−01	7.26−02	3.12+08	3.46+07
3299.509	12561−42860	49	3−2	−2.56	.96	2.75−03	3.93−04	1.69+06	3.37+05
3301.227	22947−53230	380	1−1	−.50	3.02	3.15−01	1.05−01	1.93+08	6.43+07
3301.917	26106−56383	617	6−5	.07	3.59	1.18+00	9.06−02	7.21+08	6.55+07
3303.574	24339−54600	449	3−3	−.23	3.29	5.86−01	8.37−02	3.58+08	5.11+07
3304.346	27560−57814	710	2−3	−.78	2.74	1.65−01	3.29−02	1.01+08	1.44+07
3305.972	17727−47967	91	2−3	.74	4.26	5.55+00	1.11+00	3.39+09	4.84+08
3306.356	17927−48163	91	1−2	.86	4.38	7.24+00	2.41+00	4.42+09	8.83+08
3306.490	26624−56859	680	2−2	.33	3.85	2.15+00	4.30−01	1.31+09	2.62+08
3307.008	23784−54014	450	5−5	−.48	3.04	3.34−01	3.04−02	2.04+08	1.85+07
3307.234	26106−56334	617	6−6	.95	4.47	8.85+00	6.81−01	5.40+09	4.15+08
3308.761	19390−49604	190	6−5	−1.36	2.16	4.35−02	3.35−03	2.65+07	2.41+06
3310.347	23784−53983	449	5−5	.15	3.67	1.42+00	1.29−01	8.63+08	7.85+07
3310.496	26225−56423	679	3−4	.41	3.93	2.60+00	3.71−01	1.58+09	1.76+08
3311.451	7986−38175	27	2−3	−3.52	.00	3.02−04	6.04−05	1.84+05	2.62+04
3312.224	24119−54301	450a	4−4	−.87	2.65	1.33−01	1.48−02	8.11+07	9.01+06
3313.723	12969−43138	50	2−3	−2.54	.98	2.88−03	5.77−04	1.75+06	2.50+05
3314.070	27543−57709	736	1−2	−.39	3.13	4.05−01	1.35−01	2.46+08	4.92+07
3314.441	21039−51201	250	2−2	−.72	2.81	1.93−01	3.85−02	1.17+08	2.34+07
3314.742	26624−56783	680	2−3	1.26	4.78	1.80+01	3.60+00	1.09+10	1.56+09
3315.164	26628−56783	618	4−3	−1.75	1.77	1.76−02	1.96−03	1.07+07	1.53+06
3317.121	18378−48516	139	2−1	−.57	2.95	2.69−01	5.38−02	1.63+08	5.44+07
3319.258	24119−54237	449	4−4	−.03	3.49	9.34−01	1.04−01	5.66+08	6.28+07
3320.650	19621−49727	190	5−4	−.68	2.85	2.11−01	1.92−02	1.27+08	1.42+07
3320.779	24507−54612	396	2−2	−.15	3.37	7.06−01	1.41−01	4.27+08	8.54+07
3322.474	23711−53801	396	4−5	.11	3.63	1.28+00	1.43−01	7.76+08	7.05+07
3323.738	22838−52916	379	2−2	.54	4.06	3.45+00	6.90−01	2.08+09	4.17+08
3324.372	26351−56423	617	5−4	−.09	3.44	8.21−01	7.47−02	4.96+08	5.51+07
3324.538	19390−49461	191	6−5	−.33	3.19	4.71−01	3.62−02	2.84+08	2.58+07
3325.468	19788−49851	191	4−3	−.37	3.15	4.26−01	4.73−02	2.57+08	3.67+07
3327.497	19390−49434	190	6−6	−.87	2.65	1.35−01	1.04−02	8.16+07	6.28+06
3327.961	17550−47590	86	3−4	−2.28	1.24	5.20−03	7.43−04	3.13+06	3.48+05
3328.867	26351−56383	617	5−5	1.10	4.62	1.26+01	1.15+00	7.60+09	6.91+08
3329.532	24575−54600	542a	4−3	−.17	3.35	6.72−01	7.47−02	4.05+08	5.78+07
3329.970	24336−54357		2−3	−.96	2.56	1.09−01	2.19−02	6.59+07	9.41+06
3330.316	24339−54357		3−3	−.68	2.84	2.09−01	2.98−02	1.25+08	1.79+07
3331.613	19621−49628	191	5−4	−.51	3.01	3.09−01	2.81−02	1.86+08	2.06+07
3331.778	20038−50043	144	0−1	−.63	2.89	2.33−01	2.33−01	1.40+08	4.67+07
3334.220	19621−49604	190	5−5	−.71	2.81	1.94−01	1.77−02	1.17+08	1.06+07
3334.278	26351−56334	617	5−6	.06	3.58	1.14+00	1.04−01	6.84+08	5.26+07
3335.513	12561−42533	49	3−3	−2.42	1.10	3.80−03	5.43−04	2.28+06	3.26+05
3335.770	22947−52916	379	1−2	.09	3.61	1.22+00	4.08−01	7.34+08	1.47+08
3336.254	26628−56593	618	4−4	.32	3.84	2.08+00	2.32−01	1.25+09	1.39+08

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3337.666	21716−51668	304	5−4	.05	3.57	1.12+00	1.02−01	6.73+08	7.48+07
3338.638	24181−54125	396	3−4	−.17	3.36	6.79−01	9.71−02	4.07+08	4.52+07
3339.195	19788−49727	190	4−4	−.63	2.90	2.36−01	2.63−02	1.41+08	1.57+07
3339.582	24336−54271	502	2−1	−.36	3.17	4.39−01	8.79−02	2.63+08	8.76+07
3340.567	18378−48305	139	2−2	−.31	3.22	4.94−01	9.88−02	2.95+08	5.90+07
3341.906	21716−51630	303	5−5	−.00	3.52	9.96−01	9.06−02	5.95+08	5.41+07
3342.216	18378−48290	137	2−1	−.36	3.17	4.40−01	8.80−02	2.63+08	8.75+07
3342.298	22947−52858	378	1−1	−.04	3.49	9.20−01	3.07−01	5.50+08	1.83+08
3343.240	17550−47453	88	3−4	−1.95	1.58	1.13−02	1.61−03	6.75+06	7.49+05
3343.678	24339−54237	449	3−4	−.44	3.08	3.63−01	5.19−02	2.17+08	2.41+07
3345.679	19552−49433	141	1−2	−2.34	1.19	4.59−03	1.53−03	2.74+06	5.47+05
3346.936	17550−47420	87	3−2	−1.23	2.30	5.92−02	8.46−03	3.53+07	7.05+06
3347.507	24119−53983	449	4−5	−1.18	2.35	6.63−02	7.37−03	3.95+07	3.59+06
3347.927	18378−48239	138	2−2	−.40	3.13	4.00−01	8.00−02	2.38+08	4.76+07
3349.739	22838−52683	377	2−2	−1.42	2.11	3.82−02	7.65−03	2.27+07	4.55+06
3350.284	19788−49628	191	4−4	−1.29	2.23	5.13−02	5.69−03	3.05+07	3.38+06
3351.524	17727−47556	89	2−1	−.80	2.72	1.57−01	3.14−02	9.31+07	3.10+07
3351.746	21999−51826	304	4−3	−.18	3.35	6.60−01	7.34−02	3.92+08	5.60+07
3352.929	19788−49604	190	4−5	−1.38	2.14	4.16−02	4.62−03	2.47+07	2.24+06
3353.267	19621−49434	190	5−6	−1.07	2.46	8.55−02	7.77−03	5.07+07	3.90+06
3354.064	23052−52858	378	0−1	−.06	3.47	8.79−01	8.79−01	5.21+08	1.74+08
3355.229	26628−56423	617	4−4	1.06	4.59	1.16+01	1.29+00	6.87+09	7.64+08
3355.517	7728−37521	25	3−2	−3.14	.39	7.24−04	1.03−04	4.29+05	8.58+04
3356.403	18378−48163	137	2−2	−.58	2.95	2.63−01	5.26−02	1.56+08	3.11+07
3356.695	24575−54357		4−3	−.43	3.10	3.71−01	4.12−02	2.20+08	3.14+07
3359.488	6928−36686	25	5−4	−2.08	1.45	8.32−03	7.56−04	4.92+06	5.46+05
3359.814	26628−56383	617	4−5	.16	3.69	1.45+00	1.61−01	8.56+08	7.79+07
3360.922	19552−49298	142	1−1	−1.24	2.28	5.71−02	1.90−02	3.37+07	1.12+07
3361.959	22947−52683	377	1−2	−.74	2.79	1.83−01	6.10−02	1.08+08	2.16+07
3363.815	22249−51969	307	3−3	−1.11	2.42	7.73−02	1.10−02	4.56+07	6.51+06
3364.639	20875−50587	245	3−3	−1.45	2.08	3.57−02	5.10−03	2.10+07	3.01+06
3366.789	21716−51409	302	5−4	.35	3.87	2.22+00	2.02−01	1.31+09	1.45+08
3366.867	17727−47420	87	2−2	−.40	3.13	4.00−01	8.01−02	2.36+08	4.71+07
3367.159	19552−49243	142	1−2	.34	3.87	2.21+00	7.37−01	1.30+09	2.60+08
3368.248	26225−55906	678	3−4	−.42	3.11	3.81−01	5.45−02	2.24+08	2.49+07
3368.983	22838−52512	376	2−1	−1.41	2.12	3.91−02	7.81−03	2.29+07	7.65+06
3369.146	19788−49461	191	4−5	−1.25	2.28	5.66−02	6.29−03	3.33+07	3.02+06
3369.549	21999−51668	304	4−4	.70	4.23	5.02+00	5.58−01	2.95+09	3.28+08
3370.785	21716−51374	304	5−5	.90	4.43	8.02+00	7.29−01	4.71+09	4.28+08
3372.074	17550−47197	83	3−2	−.74	2.79	1.81−01	2.59−02	1.06+08	2.13+07
3372.352	24119−53763	447	4−3	−1.42	2.10	3.77−02	4.19−03	2.21+07	3.16+06
3373.874	21999−51630	303	4−5	−.68	2.85	2.08−01	2.31−02	1.22+08	1.11+07
3374.176	17927−47556	89	1−1	−1.06	2.46	8.62−02	2.87−02	5.05+07	1.68+07
3375.724	24119−53734		4−3	−1.63	1.90	2.37−02	2.63−03	1.38+07	1.98+06
3378.676	21716−51305	301	5−4	.33	3.86	2.14+00	1.94−01	1.25+09	1.39+08
3379.021	17550−47136	85	3−2	−.18	3.35	6.57−01	9.39−02	3.84+08	7.68+07
3380.112	22249−51826	304	3−3	.54	4.07	3.47+00	4.95−01	2.02+09	2.89+08
3381.340	22947−52512	376	1−1	−.40	3.13	4.00−01	1.33−01	2.33+08	7.77+07
3381.990	24507−54067		2−2	−1.11	2.42	7.72−02	1.54−02	4.50+07	9.01+06
3382.404	17550−47107	84	3−4	−.75	2.78	1.77−01	2.52−02	1.03+08	1.14+07
3383.387	21039−50587	245	2−3	−1.73	1.80	1.87−02	3.75−03	1.09+07	1.56+06
3383.692	17727−47272	85	2−1	−.27	3.26	5.37−01	1.07−01	3.13+08	1.04+08
3383.981	17550−47093	83	3−3	.12	3.65	1.31+00	1.87−01	7.62+08	1.09+08
3384.765	7986−37521	25	2−2	−3.20	.33	6.31−04	1.26−04	3.67+05	7.35+04
3387.410	22249−51762	306	3−2	−.10	3.43	7.87−01	1.12−01	4.58+08	9.15+07
3388.966	24772−54271	502	1−1	−.58	2.95	2.65−01	8.83−02	1.54+08	5.13+07
3389.748	17927−47420	87	1−2	−.82	2.71	1.52−01	5.08−02	8.84+07	1.77+07
3392.014	24336−53808	499	2−1	.18	3.71	1.51+00	3.02−01	8.76+08	2.92+08
3392.306	17727−47197	83	2−2	.04	3.57	1.09+00	2.19−01	6.33+08	1.27+08
3392.654	17550−47017	85	3−3	.43	3.96	2.67+00	3.81−01	1.54+09	2.21+08
3393.382	23052−52512	376	0−1	−.42	3.11	3.82−01	3.82−01	2.21+08	7.37+07
3393.623	22838−52297	376	2−2	−1.07	2.46	8.48−02	1.70−02	4.91+07	9.82+06
3393.915	18378−47834	136	2−3	−1.13	2.40	7.44−02	1.49−02	4.31+07	6.15+06
3394.085	19788−49243	188	4−3	−.95	2.59	1.13−01	1.26−02	6.57+07	9.38+06
3394.585	17727−47177	81	2−1	−.16	3.37	6.89−01	1.38−01	3.99+08	1.33+08
3395.080	24339−53785		3−3	−1.39	2.14	4.05−02	5.79−03	2.34+07	3.35+06
3396.386	7728−37163	25	3−3	−2.99	.54	1.02−03	1.46−04	5.92+05	8.45+04
3396.977	7728−37158	26	3−2	−1.65	1.88	2.24−02	3.20−03	1.29+07	2.59+06
3397.221	24336−53763	503	2−3	−.52	3.01	2.99−01	5.98−02	1.73+08	2.47+07
3397.560	24339−53763	447	3−3	−.59	2.94	2.55−01	3.64−02	1.47+08	2.10+07

Table 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3397.640	7986−37410	26	2−1	−1.90	1.63	1.26−02	2.52−03	7.27+06	2.42+06
3398.220	22249−51668	304	3−4	−.68	2.85	2.09−01	2.99−02	1.21+08	1.34+07
3399.230	21999−51409	302	4−4	−.14	3.39	7.18−01	7.98−02	4.14+08	4.60+07
3399.336	17727−47136	85	2−2	.55	4.08	3.53+00	7.06−01	2.04+09	4.07+08
3400.662	24336−53734		2−3	−.76	2.78	1.75−01	3.51−02	1.01+08	1.44+07
3401.007	24339−53734		3−3	−1.02	2.52	9.64−02	1.38−02	5.56+07	7.94+06
3401.520	7377−36767	26	4−3	−1.34	2.19	4.57−02	5.08−03	2.63+07	3.76+06
3402.256	26106−55490	614	6−6	.97	4.50	9.28+00	7.13−01	5.34+09	4.11+08
3403.299	21999−51374	304	4−5	−.32	3.22	4.83−01	5.37−02	2.78+08	2.53+07
3404.356	17727−47093	83	2−3	.42	3.95	2.61+00	5.22−01	1.50+09	2.15+08
3404.755	21999−51361	300	4−3	−.83	2.71	1.49−01	1.66−02	8.58+07	1.23+07
3404.923	21716−51077	300	5−4	−1.09	2.44	8.09−02	7.35−03	4.65+07	5.17+06
3405.830	21716−51069	299	5−5	−.47	3.06	3.37−01	3.06−02	1.94+08	1.76+07
3406.442	26406−55754	676	1−2	.68	4.21	4.77+00	1.59+00	2.74+09	5.49+08
3406.802	17927−47272	85	1−1	.13	3.66	1.35+00	4.50−01	7.75+08	2.58+08
3407.461	17550−46889	83	3−4	.85	4.39	7.14+00	1.02+00	4.10+09	4.56+08
3409.218	26106−55430	614	6−5	.03	3.57	1.08+00	8.29−02	6.18+08	5.62+07
3409.605	19788−49109	188	4−4	−1.82	1.71	1.51−02	1.68−03	8.68+06	9.64+05
3410.031	24575−53892	542	4−3	−.25	3.28	5.56−01	6.18−02	3.19+08	4.56+07
3410.171	27543−56859	735	1−2	.91	4.44	8.17+00	2.72+00	4.68+09	9.37+08
3410.905	7377−36686	25	4−4	−2.14	1.39	7.24−03	8.05−04	4.15+06	4.61+05
3411.134	21716−51023	299	5−6	−.82	2.71	1.50−01	1.36−02	8.58+07	6.60+06
3411.353	21999−51305	301	4−4	.16	3.69	1.45+00	1.61−01	8.29+08	9.21+07
3413.134	17727−47017	85	2−3	.68	4.21	4.74+00	9.48−01	2.71+09	3.88+08
3414.564	26628−55906		4−4	−.53	3.00	2.96−01	3.29−02	1.69+08	1.88+07
3415.532	17927−47197	83	1−2	−.29	3.24	5.11−01	1.70−01	2.92+08	5.85+07
3416.679	20038−49298	142	0−1	−1.76	1.77	1.72−02	1.72−02	9.85+06	3.28+06
3417.273	8155−37410	26	1−1	−2.14	1.39	7.24−03	2.41−03	4.14+06	1.38+06
3417.843	17927−47177	81	1−1	.44	3.97	2.74+00	9.14−01	1.57+09	5.22+08
3418.176	26479−55727	577	1−0	−.05	3.48	8.84−01	2.95−01	5.05+08	5.05+08
3418.507	17927−47172	81	1−0	.41	3.94	2.56+00	8.53−01	1.46+09	1.46+09
3418.905	24507−53748		2−3	−.64	2.90	2.32−01	4.63−02	1.32+08	1.89+07
3419.154	26140−55379	576	3−2	−.13	3.40	7.39−01	1.06−01	4.21+08	8.43+07
3419.706	22947−52181	377	1−1	−.32	3.22	4.80−01	1.60−01	2.74+08	9.12+07
3422.499	24119−53329	444	4−4	.46	3.99	2.85+00	3.17−01	1.63+09	1.81+08
3422.658	17927−47136	85	1−2	.27	3.80	1.85+00	6.17−01	1.05+09	2.11+08
3424.286	17550−46745	81	3−3	.41	3.95	2.58+00	3.69−01	1.47+09	2.10+08
3425.009	24575−53763	541	4−3	.73	4.26	5.32+00	5.91−01	3.03+09	4.32+08
3426.337	18378−47556	135	2−1	−.18	3.35	6.54−01	1.31−01	3.71+08	1.24+08
3426.383	17550−46727	82	3−2	.08	3.62	1.21+00	1.73−01	6.86+08	1.37+08
3426.637	17727−46902	82	2−1	.12	3.66	1.33+00	2.66−01	7.56+08	2.52+08
3427.121	17550−46721	81	3−4	.86	4.40	7.28+00	1.04+00	4.13+09	4.59+08
3428.195	17727−46889	81	2−2	.29	3.83	1.97+00	3.94−01	1.12+09	2.23+08
3428.746	29056−58213	836	3−2	.53	4.07	3.41+00	4.88−01	1.94+09	3.87+08
3431.815	22838−51969	376	2−3	.05	3.58	1.12+00	2.23−01	6.33+08	9.04+07
3432.023	23052−52181	377	0−1	−.90	2.64	1.26−01	1.26−01	7.15+07	2.38+07
3434.029	22249−51361	300	3−3	−.81	2.73	1.56−01	2.23−02	8.83+07	1.26+07
3436.045	26351−55446	614	5−4	−.45	3.09	3.58−01	3.25−02	2.02+08	2.25+07
3437.046	24575−53661	539	4−3	.37	3.90	2.34+00	2.60−01	1.32+09	1.89+08
3437.631	19621−48703	187	5−4	−1.40	2.13	3.94−02	3.58−03	2.23+07	2.47+06
3437.952	26351−55430	614	5−5	.41	3.95	2.59+00	2.35−01	1.46+09	1.33+08
3439.039	21999−51069	299	4−5	−.54	2.99	2.87−01	3.19−02	1.62+08	1.47+07
3440.607	0−29056	6	4−3	−.44	3.10	3.63−01	4.03−02	2.05+08	2.92+07
3440.990	416−29469	6	3−2	−.82	2.72	1.51−01	2.16−02	8.53+07	1.71+07
3442.364	18378−47420	134	2−2	−.18	3.36	6.65−01	1.33−01	3.74+08	7.48+07
3442.671	7728−36767	26	3−3	−1.72	1.82	1.91−02	2.72−03	1.07+07	1.53+06
3442.979	24772−53808	499	1−1	−.19	3.35	6.44−01	2.15−01	3.63+08	1.21+08
3443.878	704−29733	6	2−1	−1.09	2.45	8.13−02	1.63−02	4.57+07	1.52+07
3445.151	17727−46745	81	2−3	.56	4.10	3.65+00	7.30−01	2.05+09	2.93+08
3446.791	21039−50043	244	2−1	−.99	2.54	1.02−01	2.03−02	5.71+07	1.90+07
3446.947	8155−37158	26	1−2	−2.53	1.01	2.95−03	9.84−04	1.66+06	3.31+05
3447.280	17727−46727	82	2−2	.01	3.55	1.03+00	2.06−01	5.77+08	1.15+08
3448.786	22838−51826	372	2−3	−1.01	2.53	9.77−02	1.95−02	5.48+07	7.82+06
3448.869	20641−49628	242	4−4	−1.18	2.36	6.60−02	7.34−03	3.70+07	4.11+06
3450.330	17927−46902	82	1−1	.13	3.67	1.36+00	4.54−01	7.63+08	2.54+08
3451.628	19552−48516	139	1−1	−.48	3.06	3.31−01	1.10−01	1.85+08	6.18+07
3451.917	17927−46889	81	1−2	.14	3.68	1.39+00	4.64−01	7.80+08	1.56+08
3452.276	7728−36686	25	3−4	−1.14	2.40	7.24−02	1.03−02	4.05+07	4.50+06
3453.022	22249−51201	301	3−2	−.02	3.52	9.65−01	1.38−01	5.40+08	1.08+08
3457.090	29056−57974	835	3−2	.39	3.93	2.46+00	3.52−01	1.37+09	2.75+08

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3457.512	19788−48703	187	4−4	−1.54	1.99	2.86−02	3.17−03	1.59+07	1.77+06
3458.304	19552−48460	139	1−0	−.22	3.32	6.00−01	2.00−01	3.35+08	3.35+08
3459.429	21716−50614	297	5−4	−.36	3.18	4.41−01	4.01−02	2.46+08	2.73+07
3459.911	24336−53230	501	2−1	.48	4.02	3.01+00	6.02−01	1.68+09	5.59+08
3462.354	17727−46601	79	2−1	−1.01	2.53	9.79−02	1.96−02	5.45+07	1.82+07
3462.808	22838−51708	373	2−2	−1.17	2.37	6.81−02	1.36−02	3.79+07	7.57+06
3463.304	11976−40842	48	4−3	−1.66	1.88	2.19−02	2.43−03	1.22+07	1.74+06
3464.914	20875−49727	241	3−4	−.90	2.64	1.27−01	1.81−02	7.06+07	7.84+06
3465.862	888−29733	6	1−1	−.94	2.60	1.15−01	3.83−02	6.38+07	2.13+07
3466.279	19390−48231	185	6−5	−1.34	2.20	4.59−02	3.53−03	2.55+07	2.32+06
3466.500	6928−35768	24	5−4	−1.90	1.64	1.26−02	1.14−03	6.99+06	7.76+05
3468.847	20641−49461	242	4−5	−.08	3.46	8.38−01	9.31−02	4.64+08	4.22+07
3469.012	26628−55446	614	4−4	.53	4.07	3.42+00	3.80−01	1.89+09	2.11+08
3469.390	22947−51762	375	1−2	−1.14	2.40	7.18−02	2.39−02	3.98+07	7.96+06
3469.834	21039−49851	242	2−3	−.30	3.24	5.00−01	1.00−01	2.77+08	3.96+07
3471.267	17927−46727	82	1−2	−.25	3.29	5.65−01	1.88−01	3.13+08	6.25+07
3471.346	18378−47177	130	2−1	−.09	3.45	8.10−01	1.62−01	4.48+08	1.49+08
3473.303	24575−53358		4−3	−.03	3.51	9.28−01	1.03−01	5.13+08	7.33+07
3473.497	7986−36767	26	2−3	−2.49	1.05	3.24−03	6.47−04	1.79+06	2.56+05
3475.451	704−29469	6	2−2	−.84	2.70	1.45−01	2.89−02	7.98+07	1.60+07
3475.651	17550−46314	78	3−2	.09	3.63	1.23+00	1.75−01	6.77+08	1.35+08
3475.867	19621−48383	186	5−5	−.35	3.19	4.42−01	4.02−02	2.44+08	2.22+07
3476.336	18378−47136	133	2−2	−.71	2.83	1.94−01	3.88−02	1.07+08	2.14+07
3476.704	978−29733	6	0−1	−1.24	2.30	5.75−02	5.75−02	3.18+07	1.06+07
3476.853	20875−49628	242	3−4	−.03	3.51	9.33−01	1.33−01	5.15+08	5.72+07
3477.007	19552−48305	139	1−2	−.40	3.14	4.01−01	1.34−01	2.22+08	4.43+07
3477.856	17927−46673	82	1−0	−.83	2.71	1.48−01	4.95−02	8.18+07	8.18+07
3478.374	19621−48362	185	5−4	−1.35	2.19	4.42−02	4.02−03	2.44+07	2.71+06
3478.788	19552−48290	137	1−1	−1.22	2.32	6.07−02	2.02−02	3.35+07	1.12+07
3479.683	23784−52514	443	5−6	−.82	2.72	1.52−01	1.38−02	8.37+07	6.44+06
3481.558	18378−47093	132	2−3	−1.60	1.94	2.49−02	4.99−03	1.37+07	1.96+06
3483.009	7377−36079	24	4−3	−1.97	1.57	1.07−02	1.19−03	5.89+06	8.42+05
3484.858	19788−48476	185	4−3	−1.16	2.38	6.90−02	7.66−03	3.79+07	5.41+06
3484.972	19552−48239	138	1−2	−.76	2.78	1.75−01	5.82−02	9.58+07	1.92+07
3485.342	17727−46410	78	2−1	−.06	3.48	8.69−01	1.74−01	4.77+08	1.59+08
3486.556	17927−46601	79	1−1	−1.13	2.41	7.42−02	2.47−02	4.07+07	1.36+07
3489.670	23784−52431	442	5−6	.40	3.94	2.49+00	2.27−01	1.36+09	1.05+08
3490.575	416−29056	6	3−3	−1.00	2.54	1.00−01	1.43−02	5.47+07	7.82+06
3493.290	11976−40594	48	4−4	−1.54	2.00	2.88−02	3.20−03	1.58+07	1.75+06
3493.698	21999−50614	297	4−4	−.29	3.26	5.18−01	5.75−02	2.83+08	3.14+07
3494.170	19552−48163	137	1−2	−.96	2.58	1.10−01	3.65−02	5.99+07	1.20+07
3495.288	20641−49243	238	4−3	.30	3.85	2.02+00	2.24−01	1.10+09	1.57+08
3496.190	19788−48383	186	4−5	−1.00	2.54	9.91−02	1.10−02	5.41+07	4.91+06
3497.110	17550−46137	78	3−3	.17	3.71	1.47+00	2.10−01	8.02+08	1.15+08
3497.842	888−29469	6	1−2	−1.27	2.27	5.37−02	1.79−02	2.93+07	5.86+06
3500.164	23193−51755	327	2−1	−1.27	2.27	5.32−02	1.06−02	2.89+07	9.65+06
3504.455	22838−51365	371	2−3	−.94	2.61	1.16−01	2.32−02	6.29+07	8.98+06
3504.864	18378−46902	131	2−1	−.64	2.91	2.31−01	4.63−02	1.26+08	4.19+07
3505.065	24336−52858	498	2−1	.24	3.79	1.75+00	3.51−01	9.52+08	3.17+08
3506.500	18378−46889	130	2−2	−.01	3.54	9.86−01	1.97−01	5.35+08	1.07+08
3507.139	29469−57974	835	2−2	.21	3.76	1.63+00	3.25−01	8.82+08	1.76+08
3507.390	24772−53275	500	1−2	−.11	3.44	7.80−01	2.60−01	4.23+08	8.45+07
3509.120	22846−51335	326	5−4	−.61	2.94	2.47−01	2.24−02	1.34+08	1.48+07
3509.736	23270−51755	327	0−1	−.60	2.94	2.49−01	2.49−01	1.35+08	4.49+07
3511.748	20641−49109	238	4−4	−.86	2.69	1.38−01	1.53−02	7.46+07	8.29+06
3512.080	22997−51462	327	4−4	−.76	2.78	1.73−01	1.93−02	9.37+07	1.04+07
3512.239	22997−51461	326	4−3	−.23	3.31	5.87−01	6.53−02	3.18+08	4.54+07
3512.970	24772−53230	501	1−1	−.36	3.18	4.35−01	1.45−01	2.35+08	7.84+07
3513.065	12561−41018	48	3−2	−1.41	2.14	3.89−02	5.56−03	2.10+07	4.21+06
3513.820	6928−35379	24	5−5	−.50	3.05	3.16−01	2.87−02	1.71+08	1.55+07
3514.626	19390−47835	183	6−5	−.76	2.79	1.74−01	1.34−02	9.41+07	8.56+06
3516.550	23111−51540	326	3−2	−.06	3.49	8.78−01	1.25−01	4.73+08	9.47+07
3518.680	23193−51604	327	2−3	−.28	3.26	5.21−01	1.04−01	2.81+08	4.01+07
3520.855	21039−49433	238	2−2	−.58	2.97	2.64−01	5.28−02	1.42+08	2.84+07
3521.263	7377−35768	24	4−4	−.43	3.12	3.72−01	4.13−02	2.00+08	2.22+07
3521.833	17927−46314	78	1−2	−.47	3.08	3.38−01	1.13−01	1.81+08	3.63+07
3522.268	22846−51229	326	5−5	.06	3.60	1.14+00	1.03−01	6.12+08	5.56+07
3522.896	23193−51570	330	2−3	−.59	2.95	2.54−01	5.08−02	1.37+08	1.95+07
3523.300	23193−51567	326	2−1	−.23	3.32	5.95−01	1.19−01	3.20+08	1.07+08
3524.075	20875−49243	239	3−2	.07	3.62	1.19+00	1.70−01	6.38+08	1.28+08

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3524.242	18378–46745	130	2–3	–.05	3.50	8.96–01	1.79–01	4.81+08	6.87+07
3525.856	22997–51351	329	4–4	–.09	3.46	8.18–01	9.09–02	4.39+08	4.88+07
3526.042	704–29056	6	2–3	–1.52	2.03	3.02–02	6.04–03	1.62+07	2.31+06
3526.168	7728–36079	24	3–3	–.78	2.77	1.66–01	2.37–02	8.90+07	1.27+07
3526.230	23111–51462	327	3–4	.83	4.38	6.74+00	9.63–01	3.62+09	4.02+08
3526.377	23111–51461	326	3–3	.82	4.37	6.59+00	9.41–01	3.53+09	5.05+08
3526.470	18378–46727	131	2–2	.24	3.79	1.75+00	3.49–01	9.36+08	1.87+08
3526.673	23193–51540	326	2–2	.77	4.32	5.93+00	1.19+00	3.18+09	6.36+08
3527.792	22997–51335	326	4–4	.51	4.06	3.25+00	3.61–01	1.74+09	1.94+08
3528.316	12561–40895		3–2	–2.25	1.30	5.62–03	8.03–04	3.01+06	6.03+05
3528.942	6928–35257	23	5–4	–3.73	–.18	1.86–04	1.69–05	9.97+04	1.11+04
3529.531	24575–52899	537	4–5	–.37	3.17	4.23–01	4.70–02	2.27+08	2.06+07
3529.818	23245–51567	326	1–1	.58	4.13	3.84+00	1.28+00	2.06+09	6.86+08
3530.385	22650–50968	326	6–6	.26	3.81	1.83+00	1.41–01	9.79+08	7.53+07
3531.446	19621–47930	182	5–4	–1.00	2.55	1.01–01	9.17–03	5.39+07	5.99+06
3533.008	23270–51567	326	0–1	.67	4.22	4.73+00	4.73+00	2.53+09	8.42+08
3533.201	23245–51540	326	1–2	.92	4.47	8.38+00	2.79+00	4.48+09	8.96+08
3534.530	28820–57104	811	5–5	.24	3.79	1.75+00	1.59–01	9.35+08	8.50+07
3534.914	12561–40842	48	3–3	–1.68	1.87	2.09–02	2.98–03	1.12+07	1.59+06
3536.556	23193–51461	326	2–3	1.15	4.70	1.41+01	2.82+00	7.51+09	1.07+09
3537.491	20875–49135	239	3–3	–.38	3.17	4.17–01	5.96–02	2.23+08	3.18+07
3537.729	21039–49298	239	2–1	.07	3.62	1.17+00	2.33–01	6.21+08	2.07+08
3537.896	22846–51103	327	5–5	.21	3.76	1.62+00	1.47–01	8.63+08	7.84+07
3538.310	28605–56859	775	2–2	.08	3.63	1.21+00	2.42–01	6.44+08	1.29+08
3538.550	20038–48290	137	0–1	–1.00	2.55	1.01–01	1.01–01	5.37+07	1.79+07
3538.790	28820–57070	811	5–6	–.32	3.23	4.79–01	4.36–02	2.55+08	1.96+07
3540.121	23111–51351	329	3–4	.28	3.83	1.92+00	2.74–01	1.02+09	1.13+08
3540.711	7377–35612	23	4–3	–1.62	1.93	2.40–02	2.67–03	1.28+07	1.82+06
3541.083	22997–51229	326	4–5	1.19	4.74	1.54+01	1.71+00	8.17+09	7.42+08
3542.076	23111–51335	326	3–4	1.16	4.71	1.45+01	2.07+00	7.72+09	8.58+08
3542.243	18378–46601	128	2–1	–.34	3.21	4.58–01	9.16–02	2.43+08	8.11+07
3543.392	19621–47835	183	5–5	–.86	2.69	1.38–01	1.26–02	7.36+07	6.69+06
3543.669	27543–55754	734	1–2	.66	4.21	4.56+00	1.52+00	2.42+09	4.84+08
3544.631	21039–49243	239	2–2	–.50	3.05	3.20–01	6.39–02	1.70+08	3.39+07
3545.639	22997–51192	321	4–4	.54	4.09	3.50+00	3.89–01	1.86+09	2.06+08
3545.832	24575–52769	536	4–4	.14	3.69	1.37+00	1.53–01	7.29+08	8.10+07
3546.210	19621–47812	183	5–4	–1.18	2.37	6.62–02	6.02–03	3.51+07	3.90+06
3547.203	22650–50833	321	6–5	–.14	3.41	7.17–01	5.51–02	3.80+08	3.45+07
3548.037	24336–52512	496	2–1	–.07	3.48	8.54–01	1.71–01	4.53+08	1.51+08
3549.868	12969–41131	48	2–1	–1.40	2.15	3.98–02	7.96–03	2.11+07	7.02+06
3551.114	22997–51149	321	4–3	–1.02	2.53	9.59–02	1.07–02	5.07+07	7.25+06
3552.112	24772–52916	499	1–2	.05	3.60	1.12+00	3.72–01	5.90+08	1.18+08
3552.420	19788–47930	182	4–4	–1.44	2.11	3.66–02	4.07–03	1.94+07	2.15+06
3552.828	23193–51331	321	2–2	.30	3.85	2.00+00	4.01–01	1.06+09	2.12+08
3553.741	28820–56951	810	5–4	1.51	5.06	3.24+01	2.94+00	1.71+10	1.90+09
3554.120	7728–35856	23	3–2	–1.50	2.05	3.16–02	4.52–03	1.67+07	3.34+06
3554.500	23245–51370	325	1–2	.17	3.72	1.49+00	4.97–01	7.88+08	1.58+08
3554.922	22846–50968	326	5–6	1.35	4.90	2.25+01	2.05+00	1.19+10	9.14+08
3556.680	23111–51219	325	3–3	–.16	3.39	6.85–01	9.78–02	3.61+08	5.16+07
3556.877	22997–51103	327	4–5	.96	4.51	9.11+00	1.01+00	4.80+09	4.36+08
3558.517	7986–36079	24	2–3	–.28	3.27	5.25–01	1.05–01	2.76+08	3.95+07
3559.506	24772–52858	498	1–1	.45	4.01	2.84+00	9.48–01	1.50+09	4.99+08
3560.076	23111–51192	321	3–4	–.95	2.61	1.13–01	1.62–02	5.96+07	6.62+06
3560.705	26225–54301	675	3–4	.35	3.90	2.21+00	3.16–01	1.16+09	1.29+08
3562.269	26225–54289		3–3	–.73	2.83	1.88–01	2.69–02	9.88+07	1.41+07
3564.110	12969–41018	48	2–2	–1.66	1.89	2.19–02	4.38–03	1.15+07	2.30+06
3564.533	19788–47834	183	4–3	–.53	3.02	2.96–01	3.29–02	1.55+08	2.22+07
3565.381	7728–35768	24	3–4	.11	3.66	1.29+00	1.84–01	6.76+08	7.51+07
3565.583	23111–51149	321	3–3	.85	4.40	7.11+00	1.02+00	3.73+09	5.33+08
3566.316	18378–46410	127	2–1	–.89	2.66	1.29–01	2.57–02	6.74+07	2.25+07
3566.590	19390–47420	181	6–5	–1.23	2.32	5.92–02	4.56–03	3.11+07	2.82+06
3567.360	19788–47812	183	4–4	–.86	2.69	1.38–01	1.54–02	7.25+07	8.06+06
3567.748	26140–54161	571	3–3	–.54	3.02	2.92–01	4.17–02	1.53+08	2.18+07
3568.828	26225–54237	673	3–4	.30	3.85	2.00+00	2.85–01	1.05+09	1.16+08
3568.978	21716–49727	294	5–4	–.01	3.55	9.86–01	8.96–02	5.16+08	5.74+07
3570.100	7377–35379	24	4–5	.39	3.94	2.45+00	2.73–01	1.28+09	1.17+08
3570.243	22650–50652	326	6–7	1.59	5.14	3.86+01	2.97+00	2.02+10	1.35+09
3571.226	11976–39970	46	4–3	–1.44	2.11	3.63–02	4.03–03	1.90+07	2.71+06
3571.995	22846–50833	321	5–5	.78	4.33	5.96+00	5.42–01	3.12+09	2.83+08
3572.600	22997–50980	325	4–4	–.28	3.28	5.28–01	5.87–02	2.76+08	3.07+07

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3573.400	26624−54600	673	2−3	.31	3.86	2.03+00	4.06−01	1.06+09	1.52+08
3573.836	19390−47363	181	6−6	−.14	3.41	7.27−01	5.59−02	3.80+08	2.92+07
3573.896	26628−54600	611	4−3	1.05	4.60	1.12+01	1.24+00	5.83+09	8.32+08
3574.256	26479−54449	574	1−1	−.59	2.96	2.55−01	8.49−02	1.33+08	4.43+07
3575.118	23245−51208	321	1−1	−.04	3.52	9.23−01	3.08−01	4.81+08	1.60+08
3575.249	22846−50808	322	5−4	.27	3.83	1.88+00	1.71−01	9.81+08	1.09+08
3575.374	24336−52297	496	2−2	.61	4.16	4.06+00	8.11−01	2.12+09	4.23+08
3578.380	23270−51208	321	0−1	−.34	3.22	4.62−01	4.62−01	2.41+08	8.03+07
3579.829	26140−54067	573	3−4	−.38	3.17	4.15−01	5.93−02	2.16+08	2.40+07
3581.195	6928−34844	23	5−6	.60	4.15	3.98+00	3.62−01	2.07+09	1.59+08
3581.650	21716−49628	295	5−4	−.03	3.52	9.33−01	8.48−02	4.85+08	5.39+07
3581.816	24772−52683	497	1−2	.23	3.79	1.71+00	5.69−01	8.88+08	1.78+08
3582.201	26106−54014	612	6−5	1.02	4.58	1.06+01	8.13−01	5.49+09	4.99+08
3582.690	23245−51149	328	1−2	−.46	3.10	3.48−01	1.16−01	1.81+08	3.62+07
3583.337	26550−54449	574	0−1	.46	4.01	2.86+00	2.86+00	1.49+09	4.95+08
3584.663	21716−49604	294	5−5	.88	4.43	7.56+00	6.88−01	3.93+09	3.57+08
3584.790	23111−50999	322	3−2	.05	3.61	1.13+00	1.62−01	5.88+08	1.18+08
3584.960	26351−54237	611	5−4	1.19	4.74	1.55+01	1.41+00	8.05+09	8.94+08
3585.193	23784−51668	438	5−4	−.02	3.54	9.56−01	8.69−02	4.96+08	5.51+07
3585.321	7728−35612	23	3−3	−.41	3.14	3.89−01	5.56−02	2.02+08	2.88+07
3585.707	7377−35257	23	4−4	−.64	2.91	2.29−01	2.55−02	1.19+08	1.32+07
3586.114	26106−53983	611	6−5	1.39	4.95	2.46+01	1.90+00	1.28+10	1.16+09
3586.740	22650−50523	325	6−6	−.00	3.55	1.00+00	7.69−02	5.18+08	3.99+07
3586.986	7986−35856	23	2−2	−.36	3.19	4.37−01	8.73−02	2.26+08	4.53+07
3587.240	23111−50980	325	3−4	.02	3.58	1.05+00	1.51−01	5.46+08	6.07+07
3587.424	19552−47420	134	1−2	−.29	3.27	5.16−01	1.72−01	2.67+08	5.35+07
3588.516	23711−51570	394	4−3	−.11	3.44	7.67−01	8.53−02	3.97+08	5.68+07
3588.615	22846−50704	325	5−5	.52	4.07	3.30+00	3.00−01	1.71+09	1.55+08
3588.918	23193−51048	322	2−1	.27	3.82	1.85+00	3.69−01	9.56+08	3.19+08
3589.106	6928−34782	23	5−5	−1.26	2.29	5.50−02	5.00−03	2.85+07	2.59+06
3589.456	21999−49851	295	4−3	−.50	3.05	3.16−01	3.51−02	1.63+08	2.33+07
3589.586	24119−51969		4−3	−.47	3.08	3.37−01	3.75−02	1.75+08	2.50+07
3590.086	23784−51630	440	5−5	−.37	3.18	4.25−01	3.86−02	2.20+08	2.00+07
3590.990	25900−53739	573	4−5	−.39	3.17	4.11−01	4.57−02	2.13+08	1.93+07
3591.345	22997−50833	321	4−5	−.35	3.20	4.42−01	4.91−02	2.28+08	2.08+07
3591.485	26550−54386	568	0−1	−.17	3.39	6.78−01	6.78−01	3.51+08	1.17+08
3592.486	20875−48703	237	3−4	−.93	2.62	1.16−01	1.66−02	6.01+07	6.68+06
3592.680	26140−53967	569	3−2	−.09	3.47	8.14−01	1.16−01	4.21+08	8.41+07
3592.881	17727−45552	77	2−1	−1.46	2.10	3.47−02	6.93−03	1.79+07	5.97+06
3593.329	26340−54161	571	2−3	−.06	3.50	8.81−01	1.76−01	4.55+08	6.50+07
3594.632	22997−50808	322	4−4	.75	4.31	5.68+00	6.31−01	2.93+09	3.26+08
3595.308	23193−50999	322	2−2	−.04	3.52	9.20−01	1.84−01	4.75+08	9.50+07
3595.857	19788−47590	181	4−4	−1.14	2.41	7.18−02	7.98−03	3.70+07	4.11+06
3596.198	19621−47420	181	5−5	−.84	2.72	1.45−01	1.32−02	7.50+07	6.82+06
3598.721	26225−54005	674	3−3	−.22	3.34	6.07−01	8.68−02	3.13+08	4.47+07
3598.930	26479−54258	568	1−2	−.68	2.88	2.10−01	7.00−02	1.08+08	2.16+07
3598.980	23270−51048	322	0−1	−.52	3.03	3.00−01	3.00−01	1.54+08	5.14+07
3599.624	28820−56593	809	5−4	.89	4.45	7.75+00	7.04−01	3.99+09	4.43+08
3602.460	23111−50862	322	3−3	.26	3.81	1.81+00	2.58−01	9.28+08	1.33+08
3602.534	23111−50861	324	3−2	.32	3.87	2.07+00	2.96−01	1.07+09	2.13+08
3602.774	22838−50587	370	2−3	−1.05	2.51	8.97−02	1.79−02	4.61+07	6.59+06
3603.207	21716−49461	295	5−5	.81	4.37	6.50+00	5.91−01	3.34+09	3.04+08
3603.572	19621−47363	181	5−6	−1.38	2.18	4.18−02	3.80−03	2.15+07	1.65+06
3603.673	20641−48383		4−5	−1.21	2.34	6.11−02	6.79−03	3.14+07	2.85+06
3603.828	24772−52512	496	1−1	.24	3.80	1.74+00	5.81−01	8.96+08	2.99+08
3604.383	23245−50981	323	1−0	−.61	2.95	2.47−01	8.24−02	1.27+08	1.27+08
3604.701	26624−54357		2−3	−.03	3.53	9.32−01	1.86−01	4.78+08	6.83+07
3605.206	26628−54357		4−3	.42	3.98	2.63+00	2.92−01	1.35+09	1.93+08
3605.450	21999−49727	294	4−4	1.12	4.68	1.33+01	1.48+00	6.82+09	7.58+08
3606.682	21716−49434	294	5−6	1.20	4.76	1.59+01	1.45+00	8.16+09	6.28+08
3608.861	8155−35856	23	1−2	.25	3.81	1.78+00	5.93−01	9.11+08	1.82+08
3609.486	23111−50808	322	3−4	−.65	2.91	2.26−01	3.23−02	1.16+08	1.29+07
3610.159	22650−50342	321	6−6	1.15	4.71	1.42+01	1.09+00	7.25+09	5.58+08
3610.703	23193−50880	323	2−1	−.15	3.41	7.04−01	1.41−01	3.60+08	1.20+08
3612.068	22846−50523	325	5−6	.26	3.82	1.82+00	1.65−01	9.30+08	7.15+07
3612.940	12561−40231	46	3−2	−1.62	1.94	2.40−02	3.43−03	1.23+07	2.45+06
3613.110	23193−50861	324	2−2	−.48	3.07	3.29−01	6.57−02	1.68+08	3.36+07
3613.459	26225−53892	672	3−3	.20	3.75	1.57+00	2.24−01	8.01+08	1.14+08
3613.612	26624−54289		2−3	−.26	3.30	5.55−01	1.11−01	2.83+08	4.05+07
3614.109	26628−54289		4−3	−.06	3.50	8.80−01	9.77−02	4.49+08	6.42+07

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3614.711	26225–53882		3–4	.17	3.73	1.49+00	2.13–01	7.63+08	8.48+07
3615.665	11976–39626	46	4–4	–1.84	1.72	1.45–02	1.61–03	7.37+06	8.19+05
3615.959	26624–54271		2–1	–.78	2.78	1.67–01	3.34–02	8.52+07	2.84+07
3616.162	25900–53546	569	4–3	–.28	3.28	5.26–01	5.84–02	2.68+08	3.83+07
3616.326	19552–47197	132	1–2	–.97	2.59	1.07–01	3.56–02	5.45+07	1.09+07
3617.090	24575–52213	535	4–3	–.57	2.99	2.71–01	3.01–02	1.38+08	1.97+07
3617.788	24336–51969	496	2–3	1.08	4.64	1.20+01	2.39+00	6.10+09	8.72+08
3618.285	22846–50475	324	5–4	–.65	2.91	2.23–01	2.02–02	1.13+08	1.26+07
3618.392	21999–49628	295	4–4	.25	3.81	1.78+00	1.97–01	9.05+08	1.01+08
3618.769	7986–35612	23	2–3	.28	3.84	1.91+00	3.81–01	9.71+08	1.39+08
3619.772	19390–47008	180	6–5	–1.00	2.55	9.90–02	7.62–03	5.04+07	4.58+06
3620.228	22997–50611	324	4–3	–.67	2.89	2.16–01	2.40–02	1.10+08	1.57+07
3620.880	23270–50880	323	0–1	–.83	2.73	1.47–01	1.47–01	7.48+07	2.49+07
3621.464	21999–49604	294	4–5	1.04	4.60	1.09+01	1.21+00	5.56+09	5.05+08
3621.718	28820–56423	808	5–4	.55	4.11	3.59+00	3.26–01	1.82+09	2.03+08
3622.001	22249–49851	295	3–3	.90	4.46	7.93+00	1.13+00	4.03+09	5.76+08
3623.188	19390–46982	180	6–6	.24	3.79	1.72+00	1.32–01	8.73+08	6.72+07
3623.440	20641–48231	233	4–5	–.42	3.14	3.82–01	4.24–02	1.94+08	1.76+07
3624.056	26340–53925	570	2–1	–.31	3.25	4.87–01	9.74–02	2.47+08	8.25+07
3624.310	19552–47136	133	1–2	–.75	2.81	1.77–01	5.89–02	8.98+07	1.80+07
3625.140	22846–50423	323	5–4	.27	3.83	1.88+00	1.71–01	9.56+08	1.06+08
3627.060	28820–56383	808	5–5	.04	3.60	1.10+00	1.00–01	5.57+08	5.07+07
3628.094	17727–45282	77	2–2	–1.11	2.45	7.76–02	1.55–02	3.93+07	7.87+06
3628.806	24119–51668	438	4–4	–.88	2.68	1.32–01	1.47–02	6.69+07	7.43+06
3630.353	22997–50534	323	4–3	.06	3.62	1.15+00	1.28–01	5.82+08	8.31+07
3631.465	7728–35257	23	3–4	.22	3.78	1.66+00	2.37–01	8.39+08	9.33+07
3632.042	24772–52297	496	1–2	.97	4.53	9.29+00	3.10+00	4.70+09	9.40+08
3632.558	23784–51305	437	5–4	.07	3.63	1.18+00	1.07–01	5.94+08	6.60+07
3632.980	20038–47556	135	0–1	–.30	3.26	4.96–01	4.96–01	2.51+08	8.35+07
3633.087	23711–51229	390	4–5	.04	3.60	1.09+00	1.21–01	5.49+08	4.99+07
3633.833	24119–51630	440	4–5	–.16	3.40	6.89–01	7.66–02	3.48+08	3.17+07
3634.326	23711–51219	389	4–3	.36	3.92	2.27+00	2.52–01	1.15+09	1.64+08
3635.190	24336–51837	490	2–1	–.13	3.43	7.42–01	1.48–01	3.75+08	1.25+08
3636.186	17727–45221	77	2–3	–.47	3.09	3.39–01	6.78–02	1.71+08	2.44+07
3636.496	26340–53831	568	2–3	–.18	3.38	6.62–01	1.32–01	3.34+08	4.77+07
3636.650	24336–51826	493	2–3	–.13	3.43	7.41–01	1.48–01	3.74+08	5.34+07
3636.995	20875–48362	233	3–4	–.29	3.27	5.07–01	7.25–02	2.56+08	2.84+07
3637.251	19621–47107	180	5–4	–.74	2.82	1.81–01	1.64–02	9.11+07	1.01+07
3637.862	23711–51192	385	4–4	.18	3.74	1.53+00	1.70–01	7.70+08	8.56+07
3638.300	22249–49727	294	3–4	.71	4.27	5.17+00	7.39–01	2.61+09	2.90+08
3640.392	21999–49461	295	4–5	.95	4.51	8.97+00	9.97–01	4.52+09	4.11+08
3641.454	23245–50699	323	1–2	–1.13	2.43	7.39–02	2.46–02	3.72+07	7.43+06
3643.627	23711–51149	385	4–3	.33	3.89	2.15+00	2.39–01	1.08+09	1.54+08
3643.716	21039–48476	233	2–3	–.19	3.37	6.44–01	1.29–01	3.23+08	4.62+07
3644.798	26140–53569	570	3–2	–.11	3.45	7.80–01	1.11–01	3.92+08	7.84+07
3645.090	22997–50423	323	4–4	–.05	3.52	9.02–01	1.00–01	4.53+08	5.03+07
3645.494	23111–50534	323	3–3	–.30	3.26	5.02–01	7.17–02	2.52+08	3.60+07
3645.822	25092–52512	496	0–1	.79	4.35	6.19+00	6.19+00	3.11+09	1.04+09
3647.427	12561–39970	46	3–3	–1.02	2.54	9.55–02	1.36–02	4.79+07	6.84+06
3647.844	7377–34782	23	4–5	.14	3.70	1.38+00	1.53–01	6.92+08	6.29+07
3649.304	0–27395	5	4–3	–2.53	1.03	2.95–03	3.28–04	1.48+06	2.11+05
3649.509	21716–49109	291	5–4	.90	4.46	7.94+00	7.22–01	3.97+09	4.42+08
3649.699	23711–51103	391	4–5	–.46	3.10	3.46–01	3.85–02	1.73+08	1.58+07
3650.031	24181–51570	394	3–3	.67	4.23	4.62+00	6.61–01	2.32+09	3.31+08
3650.281	19621–47008	180	5–5	.23	3.79	1.68+00	1.53–01	8.42+08	7.65+07
3650.554	26225–53610		3–4	–.12	3.44	7.50–01	1.07–01	3.75+08	4.17+07
3651.100	22997–50378	322	4–5	–.50	3.07	3.18–01	3.54–02	1.59+08	1.45+07
3651.470	22249–49628	295	3–4	1.07	4.63	1.17+01	1.68+00	5.87+09	6.53+08
3652.256	24336–51708	494	2–2	–.68	2.89	2.10–01	4.21–02	1.05+08	2.10+07
3653.352	20875–48239	229	3–2	–1.46	2.10	3.48–02	4.97–03	1.74+07	3.48+06
3653.763	19621–46982	180	5–6	–.77	2.79	1.68–01	1.53–02	8.39+07	6.46+06
3654.660	17927–45282	77	1–2	–1.48	2.08	3.31–02	1.10–02	1.65+07	3.31+06
3655.467	22838–50187	369	2–2	.24	3.81	1.75+00	3.51–01	8.75+08	1.75+08
3656.227	26406–53749		1–2	.16	3.73	1.46+00	4.87–01	7.29+08	1.46+08
3656.358	23193–50534	323	2–3	–.94	2.62	1.15–01	2.30–02	5.73+07	8.19+06
3657.139	19552–46889	130	1–2	–.65	2.92	2.26–01	7.53–02	1.13+08	2.25+07
3657.890	24507–51837	395	2–3	.04	3.60	1.10+00	2.20–01	5.47+08	7.82+07
3658.025	24339–51668	438	3–4	.72	4.28	5.26+00	7.51–01	2.62+09	2.91+08
3658.550	20641–47967	231	4–3	–1.10	2.47	8.03–02	8.92–03	4.00+07	5.72+06
3659.519	19788–47107	180	4–4	.14	3.70	1.37+00	1.52–01	6.83+08	7.59+07

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3660.330	23111−50423	323	3−4	−.93	2.64	1.19−01	1.70−02	5.92+07	6.57+06
3661.360	19788−47093	179	4−3	−1.07	2.49	8.45−02	9.39−03	4.20+07	6.01+06
3663.250	24119−51409	439	4−4	−.33	3.23	4.63−01	5.15−02	2.30+08	2.56+07
3663.458	20875−48163	231	3−2	−.70	2.86	1.99−01	2.85−02	9.91+07	1.98+07
3663.950	23784−51069	435	5−5	−.72	2.84	1.89−01	1.72−02	9.41+07	8.56+06
3664.537	24181−51462	391	3−4	.07	3.63	1.17+00	1.67−01	5.82+08	6.47+07
3664.694	24181−51461	390	3−3	−.26	3.30	5.48−01	7.83−02	2.72+08	3.89+07
3666.240	19621−46889	179	5−4	−.73	2.84	1.88−01	1.71−02	9.33+07	1.04+07
3666.944	12969−40231	46	2−2	−2.25	1.31	5.62−03	1.12−03	2.79+06	5.58+05
3668.214	26140−53394	568	3−4	−.12	3.44	7.59−01	1.08−01	3.76+08	4.18+07
3668.893	20875−48123	229	3−3	−1.18	2.38	6.59−02	9.41−03	3.26+07	4.66+06
3669.151	24119−51365	437	4−3	.21	3.78	1.64+00	1.82−01	8.10+08	1.16+08
3669.523	21999−49243	291	4−3	.70	4.27	5.07+00	5.63−01	2.51+09	3.58+08
3670.071	23784−51023	435	5−6	.40	3.96	2.48+00	2.26−01	1.23+09	9.46+07
3670.810	20038−47272	133	0−1	−.75	2.81	1.78−01	1.78−01	8.80+07	2.93+07
3671.510	26340−53569	570	2−2	−.68	2.89	2.10−01	4.20−02	1.04+08	2.08+07
3671.689	22249−49477		3−2	−1.04	2.53	9.20−02	1.31−02	4.55+07	9.10+06
3672.722	19788−47008	180	4−5	−.93	2.63	1.16−01	1.29−02	5.75+07	5.23+06
3674.766	22838−50043	369	2−1	−.09	3.47	8.08−01	1.62−01	3.99+08	1.33+08
3675.434	21039−48239	229	2−2	−1.87	1.70	1.35−02	2.71−03	6.69+06	1.34+06
3675.694	24507−51705	391	2−2	−1.05	2.52	8.97−02	1.79−02	4.43+07	8.86+06
3676.314	20641−47835	228	4−5	.13	3.70	1.35+00	1.50−01	6.68+08	6.07+07
3676.879	24181−51370	389	3−2	−.49	3.08	3.26−01	4.66−02	1.61+08	3.22+07
3677.309	28605−55791	773	2−3	.86	4.43	7.27+00	1.45+00	3.59+09	5.13+08
3677.477	18378−45563	125	2−3	−.83	2.74	1.48−01	2.96−02	7.30+07	1.04+07
3677.631	22249−49433	291	3−2	.86	4.43	7.28+00	1.04+00	3.59+09	7.18+08
3678.862	19552−46727	131	1−2	−.29	5.28	5.15−01	1.72−01	2.54+08	5.08+07
3678.980	18378−45552	124	2−1	−1.08	2.49	8.32−02	1.66−02	4.10+07	1.37+07
3679.530	24181−51351	393	3−4	−.30	3.27	5.04−01	7.21−02	2.48+08	2.76+07
3679.915	0−27167	5	4−4	−1.30	2.27	5.01−02	5 57−03	2.47+07	2.74+06
3679.330	20641−47812	228	4−4	−1.12	2.45	7.60−02	8.45−03	3.75+07	4.16+06
3680.675	25900−53061	568	4−5	.47	4.03	2.93+00	3.26−01	1.44+09	1.31+08
3681.227	26628−53785		4−3	−.11	3.45	7.72−01	8.58−02	3.80+08	5.43+07
3681.651	24181−51335	390	3−4	−.37	3.20	4.28−01	6.12−02	2.11+08	2.34+07
3681.880	29799−56951	951	4−4	.30	3.87	2.00+00	2.22−01	9.82+08	1.09+08
3682.226	28605−55754	772	2−2	1.64	5.20	4.35+01	8.71+00	2.14+10	4.28+09
3683.056	416−27560	5	3−2	−2.05	1.52	8.91−03	1.27−03	4.38+06	8.76+05
3683.616	20038−47177	130	0−1	−1.26	2.30	5.47−02	5.47−02	2.69+07	8.97+06
3684.110	21999−49135	292	4−3	.70	4.27	5.02+00	5.58−01	2.47+09	3.52+08
3685.998	23711−50833	385	4−5	.90	4.46	7.86+00	8.73−01	3.86+09	3.51+08
3686.260	19552−46673	131	1−0	−.51	3.06	3.10−01	1.03−01	1.52+08	1.52+08
3687.098	17550−44664	75	3−2	−.75	2.82	1.78−01	2.54−02	8.72+07	1.74+07
3687.459	6928−34040	21	5−4	−.47	3.10	3.39−01	3.08−02	1.66+08	1.85+07
3687.656	21999−49109	291	4−4	.46	4.03	2.88+00	3.20−01	1.41+09	1.57+08
3688.198	26628−53734		4−3	−.74	2.83	1.84−01	2.04−02	9.00+07	1.29+07
3688.476	26225−53329	669	3−4	−.02	3.54	9.45−01	1.35−01	4.63+08	5.15+07
3689.010	19621−46721	178	5−4	−1.73	1.84	1.87−02	1.70−03	9.17+06	1.02+06
3689.457	23711−50808	386	4−4	.84	4.41	6.98+00	7.76−01	3.42+09	3.80+08
3689.897	24575−51668	533	4−4	−.66	2.91	2.19−01	2.43−02	1.07+08	1.19+07
3690.450	25092−52181	497	0−1	−.10	3.47	7.96−01	7.96−01	3.90+08	1.30+08
3690.730	28820−55907	807	5−5	1.01	4.58	1.03+01	9.33−01	5.03+09	4.57+08
3693.008	24339−51409	439	3−4	−.08	3.48	8.24−01	1.18−01	4.03+08	4.48+07
3694.005	24507−51570	394	2−3	1.27	4.83	1.84+01	3.68+00	9.00+09	1.29+09
3695.054	20875−47930	229	3−4	.37	3.94	2.36+00	3.38−01	1.16+09	1.28+08
3695.507	20641−47693	225	4−3	−1.19	2.38	6.43−02	7.14−03	3.14+07	4.49+06
3696.030	19552−46601	128	1−1	−2.06	1.51	8.72−03	2.91−03	4.26+06	1.42+06
3697.426	24181−51219	389	3−3	.43	3.99	2.66+00	3.81−01	1.30+09	1.86+08
3697.536	26624−53661	670	2−3	.26	3.83	1.81+00	3.63−01	8.85+08	1.26+08
3698.611	24336−51365	491	2−3	−.02	3.55	9.63−01	1.93−01	4.69+08	6.71+07
3699.147	24336−51361	490	2−3	−.47	3.10	3.41−01	6.83−02	1.66+08	2.38+07
3701.086	24181−51192	385	3−4	1.15	4.72	1.43+01	2.04+00	6.94+09	7.72+08
3702.033	22947−49951	369	1−0	−.02	3.55	9.62−01	3.21−01	4.68+08	4.68+08
3702.500	12969−39970	46	2−3	−1.63	1.94	2.34−02	4.69−03	1.14+07	1.63+06
3703.556	22249−49243	291	3−3	.12	3.69	1.33+00	1.90−01	6.48+08	9.26+07
3703.697	23711−50704	389	4−5	.30	3.87	1.99+00	2.21−01	9.67+08	8.79+07
3703.824	23052−50043	369	0−1	.03	3.60	1.07+00	1.07+00	5.18+08	1.73+08
3704.021	24772−51762	495	1−2	−.58	2.98	2.61−01	8.69−02	1.27+08	2.53+07
3704.464	21716−48703	290	5−4	.45	4.01	2.79+00	2.54−01	1.36+09	1.51+08
3705.567	416−27395	5	3−3	−1.10	2.47	7.94−02	1.13−02	3.86+07	5.51+06
3707.048	24181−51149	385	3−2	.75	4.32	5.65+00	8.07−01	2.74+09	5.48+08

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3707.458	20641–47606	229	4–5	–1.01	2.56	9.69–02	1.08–02	4.70+07	4.27+06
3707.578	31307–58272	978	4–5	.82	4.39	6.59+00	7.32–01	3.20+09	2.91+08
3707.823	704–27666	5	2–1	–1.78	1.79	1.66–02	3.32–03	8.05+06	2.68+06
3707.922	17550–44512	76	3–2	.72	4.29	5.25+00	7.50–01	2.55+09	5.09+08
3709.248	7377–34329	21	4–3	–.30	3.27	5.01–01	5.57–02	2.43+08	3.47+07
3709.535	24119–51069	435	4–5	.06	3.63	1.14+00	1.27–01	5.53+08	5.03+07
3709.665	20641–47590	225	4–4	–.62	2.95	2.38–01	2.64–02	1.15+08	1.28+07
3711.224	20875–47812	228	3–4	–.12	3.45	7.60–01	1.09–01	3.68+08	4.09+07
3711.411	24772–51708	494	1–2	.10	3.67	1.27+00	4.22–01	6.14+08	1.23+08
3715.914	18378–45282	124	2–2	–.46	3.11	3.47–01	6.93–02	1.67+08	3.35+07
3716.442	23711–50611	388	4–3	.65	4.22	4.51+00	5.01–01	2.18+09	3.11+08
3717.837	17550–54449	706	3–1	–1.28	2.29	5.20–02	7.43–03	2.51+07	8.37+06
3718.409	22249–49135	292	3–3	.04	3.61	1.10+00	1.57–01	5.30+08	7.57+07
3719.937	0–26875	5	4–5	–.32	3.25	4.79–01	5.32–02	2.31+08	2.10+07
3721.189	24336–51201	491	2–2	–.34	3.24	4.62–01	9.24–02	2.23+08	4.45+07
3721.278	26875–53739	705	5–5	.38	3.95	2.42+00	2.20–01	1.17+09	1.06+08
3721.396	20038–46902	131	0–1	–.61	2.96	2.48–01	2.48–01	1.19+08	3.98+07
3721.606	24339–51201	437	3–2	.05	3.63	1.13+00	1.62–01	5.46+08	1.09+08
3722.564	704–27560	5	2–2	–1.02	2.55	9.55–02	1.91–02	4.60+07	9.19+06
3724.380	18378–45221	124	2–3	.22	3.79	1.66+00	3.32–01	7.98+08	1.14+08
3725.498	24575–51409	534	4–4	–.40	3.17	3.94–01	4.38–02	1.90+08	2.11+07
3726.927	24507–51331	385	2–2	.55	4.12	3.56+00	7.12–01	1.71+09	3.42+08
3727.096	23711–50534	387	4–3	.36	3.93	2.29+00	2.55–01	1.10+09	1.57+08
3727.621	7728–34547	21	3–2	–.30	3.27	5.01–01	7.16–02	2.41+08	4.81+07
3727.809	24181–50999	386	3–2	.45	4.03	2.84+00	4.06–01	1.36+09	2.73+08
3728.670	20641–47453	227	4–4	–.61	2.96	2.47–01	2.75–02	1.19+08	1.32+07
3730.388	24575–51374	533	4–5	.49	4.07	3.12+00	3.47–01	1.50+09	1.36+08
3730.945	21039–47834	228	2–3	–.28	3.29	5.27–01	1.05–01	2.52+08	3.60+07
3731.376	21039–47831	225	2–2	–.38	3.19	4.18–01	8.36–02	2.00+08	4.01+07
3732.399	17727–44512	76	2–2	.32	3.89	2.09+00	4.18–01	1.00+09	2.00+08
3733.319	888–27666	5	1–1	–1.18	2.39	6.61–02	2.20–02	3.16+07	1.05+07
3734.866	6928–33695	21	5–5	.57	4.14	3.72+00	3.38–01	1.78+09	1.62+08
3735.325	23711–50475	388	4–4	.72	4.29	5.22+00	5.80–01	2.49+09	2.77+08
3737.133	416–27167	5	3–4	–.50	3.07	3.16–01	4.52–02	1.51+08	1.68+07
3738.308	26351–53094	609	5–6	1.08	4.65	1.20+01	1.09+00	5.73+09	4.41+08
3739.120	17927–44664	75	1–2	–1.38	2.19	4.17–02	1.39–02	1.99+07	3.98+06
3739.317	17550–44285	74	3–2	–1.42	2.15	3.80–02	5.43–03	1.81+07	3.63+06
3740.061	27395–54125	707	3–4	–.22	3.36	6.06–01	8.65–02	2.89+08	3.21+07
3740.247	26225–52954	667	3–3	.45	4.02	2.82+00	4.03–01	1.34+09	1.92+08
3741.486	27666–54386	701	1–1	–.70	2.87	2.00–01	6.67–02	9.54+07	3.18+07
3742.151	31805–58520	978	3–4	.17	3.74	1.48+00	2.12–01	7.07+08	7.86+07
3742.621	23711–50423	387	4–4	.34	3.92	2.21+00	2.46–01	1.05+09	1.17+08
3743.364	7986–34692	21	2–1	–.34	3.23	4.57–01	9.14–02	2.18+08	7.25+07
3743.781	21999–48703	290	4–4	–1.12	2.45	7.51–02	8.35–03	3.57+07	3.97+06
3744.105	24507–51208	385	2–1	.35	3.93	2.26+00	4.53–01	1.08+09	3.59+08
3745.562	704–27395	5	2–3	–.63	2.94	2.34–01	4.69–02	1.11+08	1.59+07
3745.901	978–27666	5	0–1	–1.12	2.45	7.59–02	7.59–02	3.61+07	1.20+07
3746.486	17727–44411	73	2–1	–1.16	2.41	6.92–02	1.38–02	3.29+07	1.10+07
3746.931	24181–50862	386	3–3	.43	4.00	2.67+00	3.82–01	1.27+09	1.81+08
3748.264	888–27560	5	1–2	–.87	2.70	1.35–01	4.50–02	6.40+07	1.28+07
3748.492	28820–55490	805	5–6	–.21	3.36	6.13–01	5.57–02	2.91+08	2.24+07
3748.969	23711–50378	386	4–5	.53	4.11	3.41+00	3.79–01	1.62+09	1.47+08
3749.488	7377–34040	21	4–4	.44	4.01	2.75+00	3.06–01	1.31+09	1.45+08
3750.677	21039–47693	225	2–3	–.81	2.76	1.54–01	3.08–02	7.31+07	1.04+07
3751.059	26624–53275	667	2–2	–.35	3.23	4.49–01	8.97–02	2.13+08	4.25+07
3751.820	21716–48362	287	5–4	–.97	2.60	1.06–01	9.64–03	5.02+07	5.58+06
3752.420	24507–51149	385	2–3	–.45	3.13	3.56–01	7.13–02	1.69+08	2.41+07
3753.154	19390–46027	177	6–6	–1.49	2.08	3.21–02	2.47–03	1.52+07	1.17+06
3753.613	17550–44184	73	3–2	–.07	3.50	8.51–01	1.22–01	4.03+08	8.06+07
3754.506	24181–50808	386	3–4	–.30	3.28	5.06–01	7.23–02	2.39+08	2.66+07
3756.069	17550–44166	74	3–3	–1.10	2.47	7.94–02	1.13–02	3.76+07	5.36+06
3756.939	28820–55430	805	5–5	.93	4.51	8.56+00	7.78–01	4.05+09	3.68+08
3757.459	26624–53230	668	2–1	.02	3.59	1.04+00	2.09–01	4.93+08	1.64+08
3758.235	7728–34329	21	3–3	.31	3.88	2.04+00	2.92–01	9.64+08	1.38+08
3759.155	29313–55907	855	6–5	.10	3.68	1.26+00	9.71–02	5.96+08	5.42+07
3759.597	27666–54258	701	1–2	–1.88	1.70	1.32–02	4.41–03	6.25+06	1.25+06
3760.052	19390–45978	177	6–7	.15	3.73	1.41+00	1.09–01	6.66+08	4.44+07
3760.533	17927–44512	76	1–2	–.47	3.11	3.39–01	1.13–01	1.60+08	3.20+07
3761.069	27167–53748	706	4–3	–1.10	2.48	8.03–02	8.93–03	3.79+07	5.41+06
3761.410	20875–47453	227	3–4	–.95	2.63	1.13–01	1.61–02	5.33+07	5.92+06

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3762.205	27167–53739	705	4–5	–.39	3.19	4.11–01	4.57–02	1.94+08	1.76+07
3763.791	7986–34547	21	2–2	.11	3.69	1.29+00	2.58–01	6.07+08	1.21+08
3765.541	26106–52655	608	6–7	1.31	4.89	2.05+01	1.57+00	9.62+09	6.41+08
3765.700	26351–52899	608	5–5	–.27	3.30	5.33–01	4.84–02	2.51+08	2.28+07
3766.092	20875–47420	226	3–2	–1.20	2.38	6.35–02	9.07–03	2.98+07	5.97+06
3766.665	24507–51048	386	2–1	–.31	3.26	4.86–01	9.72–02	2.28+08	7.61+07
3767.194	8155–34692	21	1–1	–.02	3.56	9.55–01	3.18–01	4.49+08	1.50+08
3768.030	17927–44459	73	1–0	–.93	2.65	1.17–01	3.92–02	5.52+07	5.52+07
3768.230	22947–49477	368	1–2	–1.29	2.29	5.17–02	1.72–02	2.43+07	4.86+06
3769.995	24181–50699	387	3–2	–.28	3.29	5.23–01	7.47–02	2.45+08	4.91+07
3770.305	21716–48231	287	5–5	–.50	3.08	3.17–01	2.89–02	1.49+08	1.35+07
3770.405	19621–46136	177	5–5	–1.41	2.16	3.87–02	3.52–03	1.81+07	1.65+06
3771.473	26106–52613	607	6–5	–.76	2.81	1.73–01	1.33–02	8.11+07	7.38+06
3773.364	24575–51069	531	4–5	–1.00	2.57	9.94–02	1.10–02	4.66+07	4.23+06
3773.699	24507–50999	386	2–2	–.49	3.09	3.26–01	6.53–02	1.53+08	3.06+07
3774.827	17927–44411	73	1–1	–.72	2.86	1.91–01	6.35–02	8.92+07	2.97+07
3775.860	21999–48476	287	4–3	–1.15	2.43	7.06–02	7.84–03	3.30+07	4.72+06
3776.455	17550–44023	74	3–4	–.76	2.82	1.74–01	2.48–02	8.13+07	9.03+06
3777.061	24119–50587	432	4–3	–.60	2.98	2.53–01	2.81–02	1.18+08	1.69+07
3777.452	20641–47107	223	4–4	–.81	2.76	1.54–01	1.71–02	7.19+07	7.99+06
3778.320	22838–49298	367	2–1	–.78	2.79	1.65–01	3.29–02	7.70+07	2.57+07
3778.509	26225–52683	664	3–2	.11	3.69	1.30+00	1.85–01	6.05+08	1.21+08
3778.699	17727–44184	73	2–2	–1.22	2.36	6.03–02	1.21–02	2.81+07	5.63+06
3779.213	22249–48703	290	3–4	–1.48	2.09	3.28–02	4.68–03	1.53+07	1.70+06
3779.444	26406–52858	665	1–1	–.04	3.54	9.20–01	3.07–01	4.30+08	1.43+08
3781.188	17727–44166	74	2–3	–1.40	2.18	3.98–02	7.96–03	1.86+07	2.65+06
3781.938	29357–55791	917	2–3	.10	3.68	1.26+00	2.53–01	5.90+08	8.42+07
3782.450	24181–50611	388	3–3	–.55	3.03	2.85–01	4.06–02	1.33+08	1.89+07
3782.608	24772–51201	491	1–2	–.72	2.86	1.93–01	6.42–02	8.98+07	1.80+07
3785.706	26106–52514	608	6–6	–.38	3.20	4.19–01	3.22–02	1.95+08	1.50+07
3785.950	19621–46027	177	5–6	–.13	3.45	7.36–01	6.69–02	3.43+08	2.63+07
3786.176	22838–49243	367	2–2	–.03	3.55	9.43–01	1.89–01	4.39+08	8.78+07
3786.678	8155–34556	22	1–0	–1.60	1.98	2.51–02	8.37–03	1.17+07	1.17+07
3787.164	29357–55754	916	2–2	.17	3.75	1.47+00	2.95–01	6.86+08	1.37+08
3787.883	8155–34547	21	1–2	–.47	3.11	3.39–01	1.13–01	1.58+08	3.15+07
3789.178	21999–48383	289	4–5	–.46	3.11	3.43–01	3.82–02	1.60+08	1.45+07
3789.808	27167–53546	702	4–3	–.29	3.29	5.14–01	5.71–02	2.39+08	3.41+07
3790.094	7986–34363	22	2–1	–1.18	2.40	6.61–02	1.32–02	3.07+07	1.02+07
3790.656	24507–50880	387	2–1	–.77	2.81	1.69–01	3.38–02	7.84+07	2.61+07
3790.756	17550–43923	73	3–3	–1.12	2.46	7.59–02	1.08–02	3.52+07	5.03+06
3791.504	20641–47008	223	4–5	–1.02	2.55	9.45–02	1.05–02	4.39+07	3.99+06
3791.730	27560–53925	703	2–1	–.57	3.01	2.68–01	5.35–02	1.24+08	4.14+07
3792.156	21999–48362	287	4–4	–.51	3.06	3.06–01	3.40–02	1.42+08	1.58+07
3792.833	17927–44285	74	1–2	–1.47	2.11	3.39–02	1.13–02	1.57+07	3.14+06
3793.360	24507–50861	388	2–2	–.75	2.83	1.76–01	3.53–02	8.18+07	1.64+07
3793.478	24181–50534	387	3–3	–.27	3.31	5.37–01	7.68–02	2.49+08	3.56+07
3793.872	22947–49298	367	1–1	–.47	3.11	3.36–01	1.12–01	1.56+08	5.19+07
3794.340	19788–46136	177	4–5	–.19	3.39	6.42–01	7.13–02	2.97+08	2.70+07
3795.004	7986–34329	21	2–3	–.38	3.20	4.17–01	8.34–02	1.93+08	2.76+07
3796.000	19390–45726	176	6–5	–2.17	1.41	6.76–03	5.20–04	3.13+06	2.84+05
3797.517	26106–52431	607	6–6	.96	4.54	9.05+00	6.96–01	4.18+09	3.22+08
3797.950	20875–47197	222	3–2	–1.05	2.53	8.88–02	1.27–02	4.11+07	8.22+06
3798.513	7377–33695	21	4–5	–.70	2.88	2.00–01	2.22–02	9.22+07	8.39+06
3799.550	7728–34040	21	3–4	–.47	3.11	3.39–01	4.84–02	1.57+08	1.74+07
3801.682	22838–49135	367	2–3	–.11	3.47	7.77–01	1.55–01	3.59+08	5.13+07
3801.804	22947–49243	367	1–2	–.51	3.07	3.12–01	1.04–01	1.44+08	2.88+07
3801.975	26875–53169	704	5–6	–.19	3.39	6.53–01	5.93–02	3.01+08	2.32+07
3802.283	26624–52916	666	2–2	–.22	3.36	5.99–01	1.20–01	2.77+08	5.53+07
3803.220	18378–44664	122	2–2	–2.62	.96	2.40–03	4.80–04	1.11+06	2.21+05
3804.013	26875–53155	702	5–4	–.24	3.34	5.80–01	5.28–02	2.68+08	2.97+07
3805.345	26628–52899	608	4–5	1.21	4.79	1.61+01	1.79+00	7.41+09	6.74+08
3806.203	27543–53808	731	1–1	.19	3.77	1.55+00	5.15–01	7.12+08	2.37+08
3806.699	26351–52613	607	5–5	.88	4.46	7.55+00	6.87–01	3.48+09	3.16+08
3807.539	17927–44184	73	1–2	–.33	3.25	4.68–01	1.56–01	2.15+08	4.30+07
3808.286	24336–50587	489	2–3	–.81	2.77	1.56–01	3.12–02	7.17+07	1.02+07
3808.731	20641–46889	222	4–4	–.30	3.28	5.06–01	5.62–02	2.33+08	2.58+07
3809.043	23052–49298	367	0–1	–.93	2.65	1.17–01	1.17–01	5.36+07	1.79+07
3810.759	26624–52858	665	2–1	.10	3.68	1.27+00	2.54–01	5.84+08	1.95+08
3811.892	22249–48476	287	3–3	–.50	3.08	3.15–01	4.50–02	1.45+08	2.07+07
3812.966	7728–33947	22	3–2	–.60	2.98	2.51–01	3.59–02	1.15+08	2.30+07

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3813.059	20875−47093	222	3−3	−.07	3.51	8.45−01	1.21−01	3.88+08	5.54+07
3813.638	21716−47930	283	5−4	−.77	2.82	1.71−01	1.56−02	7.86+07	8.73+06
3813.891	29313−55526	854	6−5	.34	3.92	2.19+00	1.68−01	1.00+09	9.12+07
3814.525	8155−34363	22	1−1	−1.77	1.81	1.70−02	5.66−03	7.78+06	2.59+06
3814.785	27543−53749		1−2	−.15	3.44	7.16−01	2.39−01	3.28+08	6.56+07
3815.843	11976−38175	45	4−3	.60	4.18	3.98+00	4.42−01	1.82+09	2.61+08
3816.342	17727−43923	73	2−3	−.53	3.05	2.95−01	5.90−02	1.35+08	1.93+07
3817.650	26875−53061	701	5−5	−.05	3.53	8.86−01	8.05−02	4.05+08	3.69+07
3819.497	27395−53569	703	3−2	−.14	3.44	7.28−01	1.04−01	3.33+08	6.66+07
3820.427	6928−33096	20	5−4	.41	3.99	2.57+00	2.34−01	1.17+09	1.31+08
3821.181	26351−52514	608	5−6	1.09	4.67	1.24+01	1.12+00	5.64+09	4.34+08
3821.836	21039−47197	222	2−2	−.30	3.28	5.00−01	9.99−02	2.28+08	4.56+07
3824.076	20875−47017	224	3−3	−.70	2.88	1.98−01	2.82−02	9.01+07	1.29+07
3824.446	0−26140	4	4−3	−1.17	2.41	6.76−02	7.51−03	3.08+07	4.40+06
3825.883	7377−33507	20	4−3	.26	3.84	1.82+00	2.02−01	8.29+08	1.18+08
3826.836	21999−48123	283	4−3	−.79	2.79	1.62−01	1.80−02	7.36+07	1.05+07
3827.575	21716−47835	284	5−5	−.69	2.89	2.05−01	1.86−02	9.33+07	8.48+06
3827.826	12561−38678	45	3−2	.55	4.13	3.55+00	5.07−01	1.62+09	3.23+08
3829.125	29799−55907	948	4−5	−.20	3.38	6.33−01	7.03−02	2.88+08	2.62+07
3829.458	26406−52512	663	1−1	−.16	3.42	6.94−01	2.31−01	3.16+08	1.05+08
3829.764	20641−46745	221	4−3	−1.29	2.30	5.15−02	5.73−03	2.34+07	3.35+06
3830.864	21716−47812	284	5−4	−.69	2.89	2.05−01	1.86−02	9.30+07	1.03+07
3833.310	20641−46721	221	4−4	−.16	3.43	6.95−01	7.72−02	3.15+08	3.50+07
3834.224	7728−33802	20	3−2	.01	3.59	1.02+00	1.46−01	4.64+08	9.29+07
3836.332	26624−52683	664	2−2	.53	4.12	3.41+00	6.82−01	1.54+09	3.09+08
3837.137	21039−47093	222	2−3	−.88	2.70	1.31−01	2.62−02	5.93+07	8.47+06
3839.258	24575−50614	529	4−4	.53	4.12	3.42+00	3.80−01	1.55+09	1.72+08
3840.440	7986−34017	20	2−1	−.19	3.39	6.46−01	1.29−01	2.92+08	9.73+07
3841.050	12969−38996	45	2−1	.47	4.05	2.95+00	5.90−01	1.33+09	4.45+08
3842.901	20875−46889	222	3−4	−1.31	2.28	4.94−02	7.06−03	2.23+07	2.48+06
3842.975	20875−46889	221	3−2	−1.31	2.28	4.94−02	7.06−03	2.23+07	4.46+06
3843.260	24575−50587	528	4−3	.64	4.23	4.39+00	4.88−01	1.98+09	2.84+08
3845.171	19552−45552	124	1−1	−.56	3.02	2.75−01	9.18−02	1.24+08	4.14+07
3845.692	28605−54600	771	2−3	−.31	3.27	4.87−01	9.74−02	2.20+08	3.14+07
3846.001	27167−53161	703	4−3	−.62	2.97	2.42−01	2.69−02	1.09+08	1.56+07
3846.412	28820−54811	804	5−4	.54	4.13	3.50+00	3.18−01	1.58+09	1.75+08
3846.802	26225−52213	664	3−3	.79	4.38	6.21+00	8.87−01	2.80+09	4.00+08
3848.299	21039−47017	224	2−3	−1.23	2.35	5.83−02	1.17−02	2.63+07	3.75+06
3849.969	8155−34122	20	1−0	−.45	3.14	3.55−01	1.18−01	1.60+08	1.60+08
3850.819	7986−33947	22	2−2	−1.22	2.37	6.03−02	1.21−02	2.71+07	5.42+06
3852.575	17550−43500	73	3−4	−.57	3.02	2.69−01	3.85−02	1.21+08	1.34+07
3853.462	23784−49727	429	5−4	−.91	2.68	1.24−01	1.13−02	5.57+07	6.19+06
3854.375	25900−51837	567	4−3	−.33	3.26	4.68−01	5.20−02	2.10+08	3.00+07
3855.329	21999−47930	283	4−4	−1.16	2.43	6.98−02	7.75−03	3.13+07	3.48+06
3855.846	26140−52067	567	3−2	−.45	3.14	3.58−01	5.12−02	1.61+08	3.21+07
3856.373	416−26340	4	3−2	−1.14	2.45	7.24−02	1.03−02	3.25+07	6.50+06
3858.474	26140−52050	565	3−2	−.39	3.20	4.10−01	5.86−02	1.84+08	3.68+07
3859.214	19390−45295	175	6−5	.06	3.65	1.15+00	8.83−02	5.14+08	4.67+07
3859.913	0−25900	4	4−4	−.57	3.02	2.69−01	2.99−02	1.20+08	1.34+07
3861.341	21716−47606	283	5−5	−.54	3.04	2.86−01	2.60−02	1.28+08	1.16+07
3861.600	26624−52512	663	2−1	−.48	3.11	3.32−01	6.65−02	1.49+08	4.96+07
3863.745	21716−47590	280	5−4	−.64	2.94	2.27−01	2.06−02	1.01+08	1.13+07
3864.307	20875−46745	221	3−3	−1.99	1.60	1.03−02	1.47−03	4.59+06	6.56+05
3865.526	8155−34017	20	1−1	−.57	3.02	2.69−01	8.97−02	1.20+08	4.00+07
3867.218	24336−50187	488	2−2	.31	3.90	2.06+00	4.12−01	9.19+08	1.84+08
3867.925	20875−46721	221	3−4	−1.09	2.50	8.16−02	1.17−02	3.64+07	4.04+06
3868.243	23784−49628	430	5−4	−1.36	2.23	4.36−02	3.97−03	1.94+07	2.16+06
3869.561	21999−47835	284	4−5	−.48	3.11	3.32−01	3.69−02	1.48+08	1.35+07
3871.751	23784−49604	429	5−5	−.05	3.54	8.89−01	8.08−02	3.95+08	3.59+07
3872.503	7986−33802	20	2−2	−.57	3.02	2.69−01	5.38−02	1.20+08	2.39+07
3872.923	21999−47812	284	4−4	−.88	2.71	1.32−01	1.47−02	5.87+07	6.53+06
3873.762	19621−45428	175	5−4	−.08	3.51	8.32−01	7.56−02	3.70+08	4.11+07
3876.041	8155−33947	22	1−2	−2.31	1.28	4.90−03	1.63−03	2.17+06	4.35+05
3876.670	18378−44166	121	2−3	−2.13	1.46	7.41−03	1.48−03	3.29+06	4.70+05
3878.021	7728−33507	20	3−3	−.55	3.04	2.82−01	4.03−02	1.25+08	1.79+07
3878.574	704−26479	4	2−1	−1.18	2.41	6.61−02	1.32−02	2.93+07	9.76+06
3878.676	19788−45563	175	4−3	−1.45	2.14	3.55−02	3.94−03	1.57+07	2.25+06
3878.740	26406−52181	664	1−1	−.60	2.99	2.52−01	8.39−02	1.12+08	3.72+07
3883.282	26225−51969	663	3−3	.17	3.76	1.47+00	2.10−01	6.52+08	9.31+07
3884.361	21716−47453	282	5−4	−.40	3.19	4.01−01	3.65−02	1.77+08	1.97+07

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3885.154	24119−49851	430	4−3	−.76	2.83	1.73−01	1.93−02	7.66+07	1.09+07
3885.512	19552−45282	124	1−2	−.38	3.21	4.17−01	1.39−01	1.84+08	3.68+07
3886.284	416−26140	4	3−3	−.94	2.65	1.15−01	1.64−02	5.07+07	7.24+06
3887.050	7377−33096	20	4−4	−.81	2.78	1.55−01	1.72−02	6.84+07	7.60+06
3888.516	12969−38678	45	2−2	−.07	3.52	8.51−01	1.70−01	3.75+08	7.51+07
3888.825	24336−50043	488	2−1	.03	3.62	1.07+00	2.13−01	4.70+08	1.57+08
3889.284	21716−47420	280	5−5	−1.66	1.93	2.20−02	2.00−03	9.70+06	8.82+05
3890.390	26140−51837	567	3−3	−.73	2.86	1.86−01	2.66−02	8.21+07	1.17+07
3890.844	21999−47693	280	4−3	−.57	3.02	2.68−01	2.98−02	1.18+08	1.69+07
3891.928	27543−53230	733	1−1	.30	3.89	1.99+00	6.63−01	8.76+08	2.92+08
3892.302	28605−54289		2−3	−1.25	2.34	5.68−02	1.14−02	2.50+07	3.57+06
3892.894	22249−47930	283	3−4	−1.25	2.34	5.67−02	8.10−03	2.50+07	2.77+06
3892.980	26340−52020	567	2−1	−.74	2.85	1.83−01	3.65−02	8.03+07	2.68+07
3893.316	22838−48516	364	2−1	−.73	2.86	1.86−01	3.72−02	8.19+07	2.73+07
3893.393	23784−49461	430	5−5	.28	3.87	1.92+00	1.74−01	8.44+08	7.67+07
3893.914	19621−45295	175	5−5	−.92	2.67	1.20−01	1.09−02	5.29+07	4.81+06
3894.005	26624−52297	663	2−2	.02	3.61	1.04+00	2.09−01	4.59+08	9.17+07
3895.450	26550−52214	565	0−1	−.50	3.09	3.18−01	3.18−01	1.40+08	4.67+07
3895.658	888−26550	4	1−0	−1.44	2.15	3.63−02	1.21−02	1.60+07	1.60+07
3897.452	23784−49434	429	5−6	−.46	3.13	3.48−01	3.17−02	1.53+08	1.18+07
3897.896	21716−47363	280	5−6	.10	3.69	1.26+00	1.15−01	5.55+08	4.27+07
3898.011	8155−33802	20	1−2	−1.42	2.17	3.80−02	1.27−02	1.67+07	3.34+06
3899.037	19788−45428	175	4−4	−.96	2.63	1.10−01	1.22−02	4.81+07	5.35+06
3899.709	704−26340	4	2−2	−1.32	2.27	4.79−02	9.57−03	2.10+07	4.20+06
3900.519	26140−51771	565	3−3	−.11	3.48	7.70−01	1.10−01	3.38+08	4.82+07
3902.948	12561−38175	45	3−3	.01	3.60	1.02+00	1.46−01	4.48+08	6.40+07
3903.901	24119−49727	429	4−4	.02	3.62	1.06+00	1.17−01	4.62+08	5.14+07
3906.481	888−26479	4	1−1	−1.92	1.67	1.20−02	4.01−03	5.25+06	1.75+06
3906.748	26624−52213	664	2−3	−.07	3.52	8.57−01	1.71−01	3.75+08	5.35+07
3907.464	22249−47834	284	3−3	−.91	2.68	1.23−01	1.76−02	5.39+07	7.70+06
3907.937	22249−47831	280	3−2	−.30	3.29	5.03−01	7.18−02	2.20+08	4.39+07
3908.691	19757−45334	153	3−2	−1.47	2.12	3.39−02	4.84−03	1.48+07	2.96+06
3909.664	26479−52050	565	1−2	−.30	3.30	5.05−01	1.68−01	2.20+08	4.41+07
3909.830	22947−48516	364	1−1	−.43	3.16	3.71−01	1.24−01	1.62+08	5.40+07
3910.846	22249−47812	284	3−4	−.62	2.97	2.40−01	3.43−02	1.05+08	1.16+07
3911.005	25900−51462	562	4−4	−.76	2.83	1.73−01	1.93−02	7.56+07	8.40+06
3911.699	26624−52181	664	2−1	−1.32	2.27	4.80−02	9.60−03	2.09+07	6.97+06
3913.634	18378−43923	120	2−3	−.84	2.75	1.45−01	2.89−02	6.29+07	8.99+06
3914.273	26479−52020	567	1−1	−.55	3.04	2.83−01	9.42−02	1.23+08	4.10+07
3916.733	26106−51630	606	6−5	.35	3.94	2.23+00	1.72−01	9.70+08	8.82+07
3917.183	7986−33507	20	2−3	−1.63	1.96	2.34−02	4.69−03	1.02+07	1.46+06
3918.317	20038−45552	124	0−1	−.56	3.03	2.75−01	2.75−01	1.20+08	3.99+07
3918.418	22947−48460	364	1−0	−.29	3.30	5.11−01	1.70−01	2.22+08	2.22+08
3918.644	24339−49851	430	3−3	.21	3.80	1.62+00	2.31−01	7.03+08	1.00+08
3919.068	24119−49628	430	4−4	−.33	3.26	4.67−01	5.19−02	2.03+08	2.26+07
3920.260	978−26479	4	0−1	−1.48	2.11	3.31−02	3.31−02	1.44+07	4.79+06
3920.645	19562−45061	153	4−3	−1.85	1.74	1.41−02	1.57−03	6.13+06	8.76+05
3920.839	26340−51837	567	2−3	−.62	2.97	2.40−01	4.80−02	1.04+08	1.49+07
3921.270	20641−46136	220	4−5	−1.77	1.82	1.69−02	1.88−03	7.32+06	6.66+05
3922.100	20020−45509	153	1−1	−2.30	1.29	5.01−03	1.67−03	2.17+06	7.24+05
3922.913	416−25900	4	3−4	−1.44	2.15	3.63−02	5.19−03	1.57+07	1.75+06
3925.201	26550−52020	567	0−1	−.55	3.05	2.83−01	2.83−01	1.22+08	4.08+07
3925.646	22838−48305	364	2−2	−.22	3.38	6.08−01	1.22−01	2.63+08	5.26+07
3925.946	23052−48516	364	0−1	−.12	3.47	7.58−01	7.58−01	3.28+08	1.09+08
3926.001	26140−51604	562	3−3	−.26	3.33	5.46−01	7.80−02	2.36+08	3.37+07
3927.922	888−26340	4	1−2	−1.30	2.29	5.01−02	1.67−02	2.17+07	4.33+06
3929.114	22249−47693	280	3−3	−1.07	2.52	8.48−02	1.21−02	3.66+07	5.23+06
3929.208	26225−51668	659	3−4	−.33	3.26	4.68−01	6.69−02	2.02+08	2.25+07
3930.298	704−26140	4	2−3	−1.31	2.28	4.90−02	9.80−03	2.11+07	3.02+06
3931.122	26340−51771	565	2−3	−.26	3.33	5.45−01	1.09−01	2.35+08	3.36+07
3933.606	24772−50187	488	1−2	−.24	3.36	5.81−01	1.94−01	2.50+08	5.01+07
3935.306	22947−48351	362	1−1	−.86	2.74	1.40−01	4.65−02	6.01+07	2.00+07
3935.814	22838−48239	362	2−2	−.10	3.50	7.98−01	1.60−01	3.43+08	6.87+07
3936.772	25900−51294	564	4−3	−1.76	1.83	1.74−02	1.93−03	7.47+06	1.07+06
3937.331	21716−47107	278	5−4	−.61	2.98	2.44−01	2.22−02	1.05+08	1.17+07
3940.880	7728−33096	20	3−4	−2.03	1.57	9.33−03	1.33−03	4.01+06	4.45+05
3941.283	26340−51705	562	2−2	−.35	3.25	4.50−01	8.99−02	1.93+08	3.86+07
3942.442	22947−48305	364	1−2	−.22	3.38	6.08−01	2.03−01	2.61+08	5.22+07
3943.341	17727−43079	72	2−1	−1.36	2.24	4.37−02	8.73−03	1.87+07	6.24+06
3944.748	22947−48290	361	1−1	−1.16	2.44	6.97−02	2.32−02	2.99+07	9.96+06

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3944.892	24119−49461	430	4−5	−.56	3.04	2.77−01	3.08−02	1.19+08	1.08+07
3945.119	22249−47590	280	3−4	−.68	2.91	2.07−01	2.96−02	8.87+07	9.86+06
3947.002	25900−51229	561	4−5	−.18	3.41	6.55−01	7.28−02	2.80+08	2.55+07
3947.533	22838−48163	361	2−2	−.33	3.27	4.67−01	9.35−02	2.00+08	4.00+07
3948.105	26140−51462	562	3−4	.20	3.80	1.58+00	2.26−01	6.77+08	7.52+07
3948.778	26351−51668	604	5−4	.55	4.15	3.55+00	3.23−01	1.52+09	1.69+08
3949.156	27543−52858	730	1−1	−.60	3.00	2.53−01	8.45−02	1.08+08	3.61+07
3949.956	17550−42860	72	3−2	−.45	3.15	3.55−01	5.07−02	1.52+08	3.03+07
3951.164	26406−51708	661	1−2	.46	4.06	2.90+00	9.68−01	1.24+09	2.48+08
3951.638	23052−48351		0−1	−1.90	1.70	1.27−02	1.27−02	5.44+06	1.81+06
3952.604	21716−47008	278	5−5	−.26	3.33	5.44−01	4.95−02	2.32+08	2.11+07
3952.702	22947−48239	362	1−2	−.55	3.05	2.83−01	9.43−02	1.21+08	2.42+07
3953.155	24339−49628	430	3−4	−.28	3.32	5.24−01	7.49−02	2.24+08	2.49+07
3953.512	28605−53892	770	2−3	−1.16	2.43	6.84−02	1.37−02	2.92+07	4.17+06
3953.861	22838−48123	362	2−3	−1.10	2.50	7.92−02	1.58−02	3.38+07	4.83+06
3955.352	26479−51755	562	1−1	−.32	3.27	4.74−01	1.58−01	2.02+08	6.73+07
3955.956	24772−50043	488	1−1	−.55	3.04	2.80−01	9.34−02	1.19+08	3.98+07
3956.457	26106−51374	604	6−5	.61	4.21	4.11+00	3.16−01	1.75+09	1.59+08
3956.680	21716−46982	278	5−6	.39	3.98	2.43+00	2.21−01	1.03+09	7.96+07
3957.027	26340−51604	562	2−3	.06	3.65	1.14+00	2.28−01	4.86+08	6.94+07
3957.620	26479−51740	564	1−2	−1.20	2.40	6.38−02	2.13−02	2.72+07	5.43+06
3960.284	29357−54600	913	2−3	−.24	3.36	5.72−01	1.14−01	2.43+08	3.48+07
3961.147	23052−48290	361	0−1	−.90	2.70	1.27−01	1.27−01	5.39+07	1.80+07
3962.353	26340−51570	566	2−3	−.81	2.78	1.53−01	3.06−02	6.50+07	9.29+06
3963.108	26479−51705	562	1−2	.02	3.62	1.05+00	3.51−01	4.48+08	8.95+07
3963.438	26406−51630	654	1−2	−1.33	2.27	4.66−02	1.55−02	1.98+07	3.96+06
3964.517	22947−48163	361	1−2	−.69	2.91	2.04−01	6.80−02	8.66+07	1.73+07
3965.511	26140−51351	565	3−4	−.63	2.97	2.36−01	3.37−02	1.00+08	1.11+07
3966.064	12969−38175	45	2−3	−1.08	2.52	8.32−02	1.66−02	3.53+07	5.04+06
3966.532	26624−51828	652	2−2	−.68	2.92	2.09−01	4.18−02	8.86+07	1.77+07
3966.630	25900−51103	562	4−5	.43	4.03	2.69+00	2.99−01	1.14+09	1.04+08
3966.824	26624−51826	659	2−3	.33	3.93	2.14+00	4.27−01	9.06+08	1.29+08
3967.423	26628−51826	604	4−3	.50	4.10	3.16+00	3.51−01	1.34+09	1.91+08
3967.964	26140−51335	561	3−4	−.11	3.49	7.80−01	1.11−01	3.30+08	3.67+07
3969.260	11976−37163	43	4−3	−.02	3.58	9.55−01	1.06−01	4.04+08	5.78+07
3969.628	26225−51409	657	3−4	−.14	3.45	7.18−01	1.03−01	3.04+08	3.38+07
3970.391	24772−49951	488	1−0	−.18	3.42	6.66−01	2.22−01	2.82+08	2.82+08
3971.325	21716−46889	277	5−4	−.15	3.45	7.14−01	6.49−02	3.02+08	3.36+07
3971.820	22249−47420	281	3−2	−1.90	1.70	1.27−02	1.81−03	5.35+06	1.07+06
3973.655	28605−53763	769	2−3	.02	3.62	1.04+00	2.07−01	4.38+08	6.26+07
3974.397	26140−51294	564	3−3	−.95	2.65	1.12−01	1.60−02	4.73+07	6.76+06
3974.764	17927−43079	72	1−1	−1.90	1.70	1.26−02	4.20−03	5.31+06	1.77+06
3975.210	19913−45061	153	2−3	−1.92	1.68	1.20−02	2.40−03	5.07+06	7.25+05
3975.842	31307−56452	977	4−4	−.29	3.31	5.09−01	5.66−02	2.15+08	2.39+07
3976.390	24336−49477	487	2−2	−1.30	2.30	5.05−02	1.01−02	2.13+07	4.26+06
3976.615	27543−52683	729	1−2	.25	3.85	1.79+00	5.96−01	7.55+08	1.51+08
3976.865	24339−49477	431	3−2	−.57	3.03	2.71−01	3.88−02	1.14+08	2.29+07
3977.744	17727−42860	72	2−2	−.28	3.32	5.25−01	1.05−01	2.21+08	4.42+07
3978.464	22838−47967	361	2−3	−1.27	2.33	5.43−02	1.09−02	2.29+07	3.27+06
3979.630	26340−51461	561	2−3	−.90	2.70	1.26−01	2.51−02	5.29+07	7.55+06
3980.650	19562−44677	153	4−4	−2.34	1.26	4.57−03	5.08−04	1.92+06	2.14+05
3981.104	19552−44664	22	1−2	−2.06	1.54	8.71−03	2.90−03	3.67+06	7.33+05
3981.774	21999−47107	278	4−4	−.29	3.31	5.09−01	5.66−02	2.14+08	2.38+07
3983.350	24336−49433	485	2−2	−1.29	2.31	5.15−02	1.03−02	2.17+07	4.33+06
3983.959	21999−47093	277	4−3	−.00	3.60	9.93−01	1.10−01	4.17+08	5.96+07
3984.930	26479−51567	561	1−1	−1.34	2.27	4.62−02	1.54−02	1.94+07	6.47+06
3985.322	20641−45726	219	4−5	−1.85	1.75	1.41−02	1.57−03	5.93+06	5.39+05
3985.393	26624−51708	661	2−2	−.28	3.32	5.28−01	1.06−01	2.22+08	4.44+07
3986.176	26225−51305	655	3−4	.00	3.60	1.00+00	1.43−01	4.20+08	4.67+07
3989.006	28820−53882		5−4	−.81	2.80	1.56−01	1.42−02	6.56+07	7.29+06
3989.859	28605−53661	768	2−3	−.24	3.36	5.74−01	1.15−01	2.40+08	3.43+07
3990.377	24575−49628	527	4−4	−.62	2.98	2.40−01	2.66−02	1.00+08	1.12+07
3992.395	26628−51668	604	4−4	−1.40	2.20	3.99−02	4.43−03	1.67+07	1.85+06
3994.117	24575−49604	526	4−5	−.59	3.01	2.56−01	2.85−02	1.07+08	9.74+06
3995.199	26351−51374	604	5−5	−.96	2.65	1.11−01	1.01−02	4.62+07	4.20+06
3995.986	21999−47017	279	4−3	−.67	2.93	2.12−01	2.35−02	8.84+07	1.26+07
3996.261	24119−49135	561	4−3	−1.73	1.87	1.86−02	2.07−03	7.79+06	1.11+06
3996.779	33507−58520	1074	3−4	.09	3.69	1.24+00	1.76−01	5.16+08	5.73+07
3996.968	29799−54811	945	4−4	.17	3.78	1.49+00	1.66−01	6.23+08	6.92+07
3997.395	21999−47008	278	4−5	.38	3.98	2.37+00	2.64−01	9.91+08	9.01+07

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
3998.055	21716−46721	276	5−4	−.06	3.54	8.75−01	7.95−02	3.65+08	4.06+07
4000.266	26340−51331	556	2−2	−.83	2.77	1.48−01	2.97−02	6.19+07	1.24+07
4000.460	24119−49109	426	4−4	−.69	2.91	2.04−01	2.27−02	8.50+07	9.45+06
4001.663	17550−42533	72	3−3	−1.09	2.51	8.13−02	1.16−02	3.39+07	4.84+06
4002.665	23245−48221	320	1−1	−1.66	1.94	2.19−02	7.31−03	9.14+06	3.05+06
4003.764	27543−52512	728	1−1	−.31	3.29	4.92−01	1.64−01	2.05+08	6.82+07
4004.832	26106−51069	601	6−5	−.33	3.27	4.65−01	3.58−02	1.93+08	1.76+07
4004.976	24336−49298	486	2−1	−.74	2.86	1.81−01	3.61−02	7.51+07	2.50+07
4005.244	12561−37521	43	3−2	−.09	3.51	8.13−01	1.16−01	3.38+08	6.76+07
4006.159	26340−51294	564	2−3	−1.41	2.19	3.89−02	7.77−03	1.62+07	2.31+06
4006.314	26351−51305	603	5−4	−.03	3.57	9.34−01	8.49−02	3.88+08	4.31+07
4006.631	25092−50043	488	0−1	−.35	3.25	4.44−01	4.44−01	1.85+08	6.15+07
4006.768	23270−48221	320	0−1	−1.04	2.56	9.15−02	9.15−02	3.80+07	1.27+07
4007.274	22249−47197	277	3−2	−.45	3.15	3.54−01	5.05−02	1.47+08	2.94+07
4009.715	17927−42860	72	1−2	−.43	3.17	3.72−01	1.24−01	1.54+08	3.08+07
4010.180	29372−54301	915	3−4	−1.07	2.53	8.42−02	1.20−02	3.49+07	3.88+06
4011.412	20641−45563	218	4−3	−1.46	2.14	3.47−02	3.85−03	1.44+07	2.05+06
4011.710	19757−44677	153	3−4	−1.84	1.76	1.45−02	2.06−03	5.99+06	6.66+05
4012.160	26106−51023	601	6−6	−1.50	2.10	3.13−02	2.41−03	1.30+07	9.97+05
4013.641	25900−50808	557	4−4	−.84	2.77	1.46−01	1.62−02	6.04+07	6.71+06
4013.798	24336−49243	485	2−3	−1.02	2.59	9.65−02	1.93−02	4.00+07	5.71+06
4013.822	24336−49243	486	2−2	−.65	2.96	2.26−01	4.53−02	9.37+07	1.87+07
4014.280	24339−49243	426	3−3	−1.25	2.36	5.68−02	8.12−03	2.35+07	3.36+06
4014.534	28820−53722	802	5−5	.84	4.45	6.97+00	6.33−01	2.88+09	2.62+08
4016.429	26479−51370	560	1−2	−.57	3.04	2.72−01	9.05−02	1.12+08	2.25+07
4017.093	22249−47136	279	3−2	−1.09	2.51	8.08−02	1.15−02	3.34+07	6.68+06
4017.152	24575−49461	527	4−5	−.11	3.50	7.82−01	8.68−02	3.23+08	2.94+07
4018.282	26340−51219	560	2−3	−.55	3.05	2.79−01	5.58−02	1.15+08	1.65+07
4019.050	21039−45914	219	2−3	−1.75	1.85	1.78−02	3.56−03	7.34+06	1.05+06
4020.490	29372−54237	913	3−4	−.72	2.88	1.91−01	2.72−02	7.87+07	8.74+06
4021.622	26140−50999	557	3−2	−1.01	2.60	9.86−02	1.41−02	4.07+07	8.13+06
4021.870	22249−47107	278	3−4	.12	3.72	1.31+00	1.87−01	5.40+08	6.00+07
4022.212	22838−47693		2−3	−1.69	1.91	2.03−02	4.07−03	8.38+06	1.20+06
4022.450	19390−44244	173	6−5	−2.27	1.33	5.37−03	4.13−04	2.21+06	2.01+05
4022.744	26479−51331	556	1−2	−1.05	2.56	8.95−02	2.98−02	3.69+07	7.38+06
4024.109	22249−47093	277	3−3	−1.28	2.32	5.21−02	7.44−03	2.15+07	3.07+06
4024.735	26140−50980	560	3−4	.01	3.62	1.03+00	1.47−01	4.24+08	4.71+07
4029.640	26340−51149	556	2−3	−.31	3.30	4.92−01	9.84−02	2.02+08	2.89+07
4030.186	17727−42533	72	2−3	−1.50	2.11	3.16−02	6.32−03	1.30+07	1.86+06
4030.499	25900−50704	560	4−5	.14	3.74	1.38+00	1.53−01	5.65+08	5.14+07
4031.243	24336−49135	486	2−3	−1.45	2.16	3.55−02	7.11−03	1.46+07	2.08+06
4031.727	24339−49135	427	3−3	−1.39	2.22	4.08−02	5.83−03	1.67+07	2.39+06
4031.965	26406−51201	655	1−2	−.14	3.47	7.32−01	2.44−01	3.00+08	6.01+07
4032.469	23245−48037	320	1−2	−1.25	2.35	5.58−02	1.86−02	2.29+07	4.58+06
4032.629	11976−36767	44	4−3	−1.79	1.82	1.62−02	1.80−03	6.65+06	9.50+05
4033.190	20641−45428	218	4−4	−1.69	1.92	2.04−02	2.27−03	8.37+06	9.30+05
4036.370	22249−47017	279	3−3	−2.02	1.58	9.46−03	1.35−03	3.87+06	5.53+05
4038.622	26628−51381	600	4−4	−.84	2.77	1.46−01	1.62−02	5.97+07	6.64+06
4039.940	21999−46745	276	4−3	−1.61	2.00	2.47−02	2.74−03	1.01+07	1.44+06
4040.650	26624−51365	655	2−3	−.12	3.49	7.65−01	1.53−01	3.12+08	4.46+07
4041.288	26628−51365	603	4−3	−.64	2.97	2.31−01	2.57−02	9.43+07	1.35+07
4041.911	26628−51361	602	4−3	−1.10	2.51	8.00−02	8.89−03	3.27+07	4.67+06
4043.901	21999−46721	276	4−4	−.62	2.99	2.41−01	2.68−02	9.83+07	1.09+07
4043.993	26140−50861	559	3−2	−.37	3.23	4.23−01	6.05−02	1.73+08	3.45+07
4044.612	22838−47556	359	2−1	−.18	3.42	6.54−01	1.31−01	2.66+08	8.88+07
4045.815	11976−36686	43	4−4	.66	4.27	4.57+00	5.08−01	1.86+09	2.07+08
4046.629	24772−49477	487	1−2	−1.12	2.49	7.65−02	2.55−02	3.12+07	6.23+06
4047.315	18378−43079	117	2−1	−1.80	1.81	1.58−02	3.17−03	6.45+06	2.15+06
4049.331	20875−45563	218	3−3	−1.35	2.26	4.47−02	6.38−03	1.82+07	2.60+06
4051.923	27395−52067	700	3−2	−.59	3.02	2.59−01	3.71−02	1.05+08	2.11+07
4052.312	27167−51837	700	4−3	−.75	2.86	1.78−01	1.98−02	7.23+07	1.03+07
4052.466	26479−51149	563	1−2	−.84	2.77	1.45−01	4.84−02	5.90+07	1.18+07
4052.664	24575−49243	524	4−3	−1.13	2.48	7.49−02	8.32−03	3.04+07	4.35+06
4052.724	26140−50808	557	3−4	−.99	2.62	1.03−01	1.48−02	4.19+07	4.66+06
4053.820	24772−49433	485	1−2	−1.26	2.35	5.52−02	1.84−02	2.24+07	4.48+06
4054.180	26340−50999	557	2−2	−1.10	2.51	8.01−02	1.60−02	3.25+07	6.50+06
4054.833	27395−52050	698	3−2	−.09	3.52	8.19−01	1.17−01	3.32+08	6.64+07
4054.883	27560−52214	698	2−1	−.11	3.50	7.82−01	1.56−01	3.17+08	1.06+08
4055.038	20641−45295	218	4−5	−.77	2.84	1.70−01	1.89−02	6.89+07	6.26+06
4055.980	29357−54005	914	2−3	−1.35	2.26	4.50−02	9.00−03	1.83+07	2.61+06

Table 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe i *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
4056.530	23111−47756	320	3−3	−1.95	1.66	1.12−02	1.60−03	4.54+06	6.49+05
4057.346	22249−46889	277	3−4	−1.05	2.56	8.99−02	1.28−02	3.64+07	4.05+06
4057.654	27543−52181	729	1−1	−1.65	1.96	2.24−02	7.48−03	9.09+06	3.03+06
4058.227	25900−50534	558	4−3	−.27	3.34	5.37−01	5.97−02	2.18+08	3.11+07
4058.756	19552−44184	120	1−2	−1.21	2.40	6.17−02	2.06−02	2.50+07	4.99+06
4059.726	28605−53230	767	2−1	−.25	3.36	5.61−01	1.12−01	2.27+08	7.57+07
4062.444	22947−47556	359	1−1	.05	3.65	1.11+00	3.70−01	4.49+08	1.50+08
4063.286	27167−51771	698	4−3	.28	3.89	1.89+00	2.10−01	7.64+08	1.09+08
4063.596	12561−37163	43	3−3	.44	4.05	2.75+00	3.93−01	1.11+09	1.59+08
4064.450	12561−37158	44	3−2	−2.34	1.27	4.57−03	6.53−04	1.85+06	3.69+05
4065.392	27666−52257	698	1−0	−.43	3.17	3.68−01	1.23−01	1.48+08	1.48+08
4066.590	24119−48703	424	4−4	−.63	2.97	2.32−01	2.58−02	9.36+07	1.04+07
4066.979	22838−47420	358	2−2	−.23	3.38	5.92−01	1.18−01	2.39+08	4.78+07
4067.274	20641−45221	217	4−3	−.52	3.09	3.02−01	3.36−02	1.22+08	1.74+07
4067.984	25900−50475	559	4−4	.35	3.96	2.23+00	2.47−01	8.97+08	9.97+07
4069.080	26479−51048	557	1−1	−1.01	2.60	9.69−02	3.23−02	3.90+07	1.30+07
4070.766	26140−50699	558	3−2	.04	3.65	1.09+00	1.56−01	4.40+08	8.80+07
4071.520	20875−45428	218	3−4	−.88	2.73	1.32−01	1.88−02	5.30+07	5.89+06
4071.740	12969−37521	43	2−2	.42	4.03	2.63+00	5.26−01	1.06+09	2.12+08
4072.518	27666−52214	698	1−1	−.32	3.29	4.82−01	1.61−01	1.94+08	6.46+07
4073.760	26340−50880	558	2−1	−.02	3.59	9.50−01	1.90−01	3.82+08	1.27+08
4074.789	24575−49109	524	4−4	−.12	3.49	7.58−01	8.42−02	3.05+08	3.38+07
4076.232	24772−49298	486	1−1	−1.03	2.58	9.26−02	3.09−02	3.72+07	1.24+07
4076.498	21039−45563	218	2−3	−1.02	2.59	9.55−02	1.91−02	3.83+07	5.48+06
4076.636	25900−50423	558	4−4	.28	3.90	1.93+00	2.14−01	7.74+08	8.60+07
4076.810	26340−50862	557	2−3	−.41	3.20	3.86−01	7.72−02	1.55+08	2.21+07
4076.884	26340−50861	559	2−2	−1.29	2.32	5.09−02	1.02−02	2.04+07	4.09+06
4078.356	21039−45552	217	2−1	−.62	2.99	2.40−01	4.80−02	9.62+07	3.21+07
4079.186	27560−52067	700	2−2	−.64	2.97	2.31−01	4.63−02	9.27+07	1.85+07
4079.841	23052−47556	359	0−1	−.47	3.14	3.35−01	3.35−01	1.34+08	4.48+07
4080.226	26479−50981	558	1−0	−.31	3.30	4.93−01	1.64−01	1.98+08	1.98+08
4080.886	26550−51048	557	0−1	−.86	2.75	1.37−01	1.37−01	5.48+07	1.83+07
4082.125	27560−52050	698	2−2	−.54	3.07	2.90−01	5.81−02	1.16+08	2.33+07
4082.432	29320−53808	906	1−1	−.54	3.07	2.88−01	9.60−02	1.15+08	3.84+07
4083.554	18378−42860	117	2−2	−1.58	2.03	2.63−02	5.26−03	1.05+07	2.10+06
4083.780	27560−52040	697	2−1	−.49	3.12	3.25−01	6.51−02	1.30+08	4.34+07
4084.498	26875−51351	698	5−4	.24	3.85	1.75+00	1.59−01	6.99+08	7.77+07
4085.011	22947−47420	358	1−2	−.43	3.18	3.74−01	1.25−01	1.49+08	2.99+07
4085.312	26140−50611	559	3−3	−.02	3.60	9.64−01	1.38−01	3.85+08	5.50+07
4085.980	33507−57974	1073	3−2	−.12	3.49	7.61−01	1.09−01	3.04+08	6.08+07
4087.099	26875−51335	694	5−4	−.50	3.11	3.18−01	2.89−02	1.27+08	1.41+07
4087.801	29469−53925	832	2−1	−1.40	2.21	3.96−02	7.92−03	1.58+07	5.27+06
4088.567	29357−53808	906	2−1	−.41	3.20	3.88−01	7.77−02	1.55+08	5.16+07
4089.225	23784−48231	422	5−5	−.99	2.62	1.03−01	9.34−03	4.10+07	3.72+06
4090.077	27395−51837	700	3−3	−.82	2.79	1.52−01	2.16−02	6.04+07	8.63+06
4090.326	12969−37410	44	2−1	−3.54	.07	2.88−04	5.77−05	1.15+05	3.83+04
4090.984	27167−51604	695	4−3	−.88	2.73	1.31−01	1.45−02	5.22+07	7.45+06
4091.557	22838−47272	357	2−1	−1.24	2.37	5.75−02	1.15−02	2.29+07	7.64+06
4092.287	29320−53749		1−2	−.44	3.18	3.67−01	1.22−01	1.46+08	2.93+07
4092.512	7377−31805	18	4−3	−3.69	−.08	2.04−04	2.27−05	8.13+04	1.16+04
4095.274	33802−58213	1075	2−2	−.60	3.02	2.53−01	5.06−02	1.01+08	2.01+07
4095.973	20875−45282	217	3−2	−.68	2.93	2.09−01	2.98−02	8.31+07	1.66+07
4096.114	29357−53763	911	2−3	−.39	3.22	4.04−01	8.07−02	1.60+08	2.29+07
4096.217	7728−32134	18	3−2	−3.62	−.01	2.40−04	3.43−05	9.54+04	1.91+04
4097.099	26479−50880	558	1−1	−.87	2.74	1.34−01	4.47−02	5.33+07	1.78+07
4098.183	26140−50534	558	3−3	−.09	3.52	8.13−01	1.16−01	3.23+08	4.62+07
4099.080	26628−51017	600	4−5	−1.79	1.83	1.64−02	1.82−03	6.51+06	5.92+05
4100.739	6928−31307	18	5−4	−2.59	1.02	2.57−03	2.34−04	1.02+06	1.13+05
4101.272	27395−51771	698	3−3	−.46	3.15	3.44−01	4.91−02	1.36+08	1.95+07
4101.681	20038−44411	120	0−1	−1.67	1.94	2.14−02	2.14−02	8.48+06	2.83+06
4103.620	26225−50587	650	3−3	−1.81	1.81	1.56−02	2.23−03	6.18+06	8.82+05
4104.132	26340−50699	558	2−2	−.38	3.23	4.15−01	8.31−02	1.65+08	3.29+07
4104.472	24119−48476	422	4−3	−1.94	1.67	1.14−02	1.27−03	4.53+06	6.47+05
4104.970	26875−51229	694	5−5	−1.29	2.32	5.08−02	4.62−03	2.01+07	1.83+06
4106.265	20875−45221	217	3−3	−1.44	2.17	3.63−02	5.19−03	1.44+07	2.05+06
4106.437	27395−51740	697	3−2	−.60	3.02	2.54−01	3.63−02	1.00+08	2.01+07
4107.492	22838−47177	354	2−1	.07	3.68	1.17+00	2.34−01	4.63+08	1.54+08
4108.138	26140−50475	559	3−4	−1.35	2.26	4.44−02	6.34−03	1.76+07	1.95+06
4109.070	26550−50880	558	0−1	−.67	2.94	2.13−01	2.13−01	8.40+07	2.80+07
4109.805	22947−47272	357	1−1	−.11	3.50	7.76−01	2.59−01	3.06+08	1.02+08

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
4111.060	26875–51192	689	5–4	–1.25	2.37	5.68–02	5.16–03	2.24+07	2.49+06
4112.350	27395–51705	695	3–2	–.84	2.78	1.45–01	2.08–02	5.74+07	1.15+07
4112.972	33695–58002	1103	5–6	.56	4.18	3.66+00	3.33–01	1.44+09	1.11+08
4114.448	22838–47136	357	2–2	–.43	3.18	3.69–01	7.39–02	1.46+08	2.91+07
4114.957	27167–51462	695	4–4	–.72	2.89	1.90–01	2.11–02	7.49+07	8.32+06
4116.970	26140–50423	558	3–4	–1.48	2.14	3.35–02	4.79–03	1.32+07	1.46+06
4117.320	24772–49053	484	1–2	–1.93	1.68	1.17–02	3.90–03	4.60+06	9.20+05
4117.850	27560–51837	700	2–3	–.80	2.82	1.59–01	3.17–02	6.24+07	8.91+06
4117.870	34547–58825	1103	2–2	–.17	3.44	6.76–01	1.35–01	2.66+08	5.32+07
4118.548	28820–53094	801	5–6	1.16	4.77	1.44+01	1.31+00	5.68+09	4.37+08
4118.904	26340–50611	559	2–3	–.77	2.85	1.71–01	3.43–02	6.74+07	9.63+06
4120.209	24119–48383	423	4–5	–.38	3.23	4.13–01	4.59–02	1.62+08	1.48+07
4121.805	22838–47093	356	2–3	–.49	3.12	3.21–01	6.43–02	1.26+08	1.80+07
4122.522	22947–47197	356	1–2	–.61	3.00	2.45–01	8.16–02	9.60+07	1.92+07
4123.748	21039–45282	217	2–2	–.99	2.63	1.02–01	2.05–02	4.01+07	8.03+06
4124.490	29372–53610		3–4	–1.21	2.40	6.10–02	8.71–03	2.39+07	2.66+06
4125.622	34040–58272	1103	4–5	.45	4.06	2.81+00	3.12–01	1.10+09	1.00+08
4125.883	22947–47177	354	1–1	–1.02	2.59	9.51–02	3.17–02	3.73+07	1.24+07
4126.192	26875–51103	695	5–5	–.22	3.39	6.02–01	5.47–02	2.36+08	2.14+07
4126.880	22947–47172	354	1–0	–1.84	1.77	1.44–02	4.80–03	5.64+06	5.64+06
4127.611	23052–47272	357	0–1	–.12	3.50	7.58–01	7.58–01	2.97+08	9.90+07
4127.807	26479–50699	558	1–2	–.26	3.35	5.48–01	1.83–01	2.14+08	4.29+07
4129.220	27560–51771	698	2–3	–1.41	2.20	3.86–02	7.72–03	1.51+07	2.16+06
4129.474	27395–51604	695	3–3	–1.05	2.56	8.85–02	1.26–02	3.46+07	4.95+06
4130.035	12561–36767	44	3–3	–2.74	.88	1.82–03	2.60–04	7.12+05	1.02+05
4132.060	12969–37163	43	2–3	–.20	3.42	6.31–01	1.26–01	2.46+08	3.52+07
4132.540	34329–58520	1103	3–4	.21	3.83	1.63+00	2.33–01	6.36+08	7.07+07
4132.902	22947–47136	357	1–2	–.09	3.52	8.08–01	2.69–01	3.16+08	6.31+07
4133.869	27167–51351	698	4–4	–.36	3.26	4.39–01	4.88–02	1.71+08	1.91+07
4134.340	0–24181	3	4–3	–4.15	–.53	7.08–05	7.87–06	2.76+04	3.95+03
4134.433	24336–48516	482	2–1	–.71	2.91	1.95–01	3.90–02	7.61+07	2.54+07
4134.680	22838–47017	357	2–3	.18	3.79	1.50+00	3.00–01	5.85+08	8.35+07
4136.512	27167–51335	694	4–4	–.67	2.95	2.15–01	2.39–02	8.37+07	9.30+06
4137.002	27543–51708	726	1–2	.32	3.94	2.10+00	7.01–01	8.20+08	1.64+08
4137.417	34547–58710	1103	2–3	–.14	3.48	7.23–01	1.45–01	2.82+08	4.03+07
4137.980	22846–47006	320	5–5	–2.38	1.23	4.13–03	3.75–04	1.61+06	1.46+05
4138.840	18378–42533	117	2–3	–2.78	.84	1.66–03	3.32–04	6.46+05	9.23+04
4139.929	7986–32134	18	2–2	–2.84	.78	1.45–03	2.89–04	5.63+05	1.13+05
4140.441	27560–51705	695	2–2	–.84	2.78	1.45–01	2.91–02	5.66+07	1.13+07
4141.862	24339–48476	422	3–3	–.98	2.64	1.04–01	1.49–02	4.06+07	5.80+06
4143.417	24575–48703	523	4–4	.65	4.26	4.42+00	4.91–01	1.72+09	1.91+08
4143.870	12561–36686	43	3–4	–.12	3.50	7.59–01	1.08–01	2.95+08	3.27+07
4145.206	21716–45833	274	5–4	–1.71	1.91	1.95–02	1.77–03	7.57+06	8.41+05
4146.070	24119–48231	422	4–5	–.87	2.75	1.35–01	1.50–02	5.25+07	4.78+06
4147.347	26875–50980	693	5–4	–1.13	2.49	7.46–02	6.78–03	2.89+07	3.22+06
4147.672	11976–36079	42	4–3	–1.50	2.12	3.16–02	3.51–03	1.23+07	1.75+06
4149.372	26875–50968	694	5–6	–.08	3.54	8.36–01	7.60–02	3.24+08	2.49+07
4149.767	416–24507	3	3–2	–4.82	–1.20	1.51–05	2.16–06	5.86+03	1.17+03
4150.258	27666–51755	695	1–1	–.50	3.11	3.13–01	1.04–01	1.21+08	4.04+07
4151.960	28605–52683	764	2–2	–.48	3.14	3.33–01	6.66–02	1.29+08	2.58+07
4152.170	7728–31805	18	3–3	–2.45	1.17	3.55–03	5.07–04	1.37+06	1.96+05
4153.910	27395–51462	695	3–4	.49	4.11	3.08+00	4.40–01	1.19+09	1.32+08
4154.110	27395–51461	694	3–3	–.54	3.08	2.88–01	4.11–02	1.11+08	1.59+07
4154.500	22838–46902	355	2–1	.14	3.76	1.39+00	2.79–01	5.39+08	1.80+08
4154.810	27167–51229	694	4–5	.40	4.01	2.49+00	2.77–01	9.62+08	8.74+07
4156.460	27167–51219	693	4–3	–.98	2.63	1.04–01	1.15–02	4.00+07	5.72+06
4156.670	23784–47835	419	5–5	–.78	2.84	1.67–01	1.51–02	6.43+07	5.84+06
4156.800	22838–46889	354	2–2	.12	3.74	1.33+00	2.66–01	5.14+08	1.03+08
4157.790	27560–51604	695	2–3	.34	3.96	2.17+00	4.34–01	8.38+08	1.20+08
4158.800	27666–51705	695	1–2	–.01	3.61	9.83–01	3.28–01	3.79+08	7.59+07
4160.560	23784–47812	419	5–4	–1.76	1.86	1.74–02	1.58–03	6.71+06	7.46+05
4161.080	27167–51192	689	4–4	–.88	2.74	1.33–01	1.48–02	5.13+07	5.70+06
4161.490	24339–48362	422	3–4	–1.35	2.26	4.42–02	6.31–03	1.70+07	1.89+06
4163.680	27560–51570	274	2–3	–1.12	2.49	7.50–02	1.50–02	2.89+07	4.12+06
4164.800	24119–48123	418	4–3	–1.68	1.94	2.08–02	2.31–03	8.01+06	1.14+06
4167.860	26628–50614	599	4–4	–.78	2.84	1.68–01	1.86–02	6.44+07	7.15+06
4167.960	29372–53358		3–3	–.75	2.87	1.77–01	2.53–02	6.79+07	9.70+06
4168.620	27167–51149	689	4–3	–1.07	2.55	8.55–02	9.50–03	3.28+07	4.69+06
4168.950	27560–51540	694	2–2	–.73	2.89	1.88–01	3.75–02	7.20+07	1.44+07
4169.770	27395–51370	693	3–2	–1.04	2.58	9.20–02	1.31–02	3.53+07	7.06+06

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
4170.900	24336–48305	482	2–2	–.26	3.36	5.54–01	1.11–01	2.12+08	4.25+07
4171.700	29799–53763	941	4–3	–.09	3.53	8.05–01	8.95–02	3.09+08	4.41+07
4171.900	26624–50587	650	2–3	–.55	3.07	2.84–01	5.68–02	1.09+08	1.55+07
4172.130	26225–50187	649	3–2	.12	3.74	1.33+00	1.90–01	5.10+08	1.02+08
4172.640	26875–50833	689	5–5	–.36	3.26	4.32–01	3.93–02	1.65+08	1.50+07
4172.750	7728–31686	19	3–2	–2.33	1.29	4.68–03	6.68–04	1.79+06	3.58+05
4172.980	29372–53329	909	3–4	–.80	2.82	1.57–01	2.24–02	6.01+07	6.68+06
4173.320	22947–46902	355	1–1	–.89	2.73	1.30–01	4.34–02	4.98+07	1.66+07
4173.920	7986–31937	19	2–1	–2.67	.95	2.14–03	4.28–04	8.19+05	2.73+05
4174.420	28820–52769	799	5–4	–1.14	2.48	7.21–02	6.56–03	2.76+07	3.07+06
4174.920	7377–31323	19	4–3	–2.34	1.28	4.57–03	5.08–04	1.75+06	2.50+05
4175.640	22947–46889	354	1–2	.09	3.71	1.24+00	4.14–01	4.75+08	9.50+07
4176.570	27167–51103	695	4–5	.18	3.80	1.51+00	1.68–01	5.78+08	5.25+07
4177.590	7377–31307	18	4–4	–2.42	1.20	3.80–03	4.22–04	1.45+06	1.61+05
4180.400	21999–45914	274	4–3	–1.80	1.82	1.58–02	1.76–03	6.05+06	8.64+05
4181.550	28605–52512	763	2–1	–.55	3.07	2.83–01	5.66–02	1.08+08	3.60+07
4181.760	22838–46745	354	2–3	.45	4.07	2.83+00	5.67–01	1.08+09	1.54+08
4182.380	24336–48239	476a	2–2	–.35	3.27	4.49–01	8.97–02	1.71+08	3.42+07
4182.770	27560–51461	694	2–3	–.63	2.99	2.34–01	4.68–02	8.91+07	1.27+07
4183.020	27395–51294	697	3–3	–1.15	2.47	7.07–02	1.01–02	2.70+07	3.85+06
4184.890	22838–46727	355	2–2	–.06	3.56	8.75–01	1.75–01	3.33+08	6.66+07
4187.040	19757–43634	152	3–2	.17	3.79	1.48+00	2.11–01	5.63+08	1.13+08
4187.590	27666–51540	694	1–2	–.22	3.41	6.07–01	2.02–01	2.31+08	4.62+07
4187.800	19562–43435	152	4–3	.13	3.75	1.35+00	1.50–01	5.13+08	7.33+07
4188.730	33947–57814		2–3	.37	3.99	2.33+00	4.65–01	8.85+08	1.26+08
4189.560	29799–53661	940	4–3	–.38	3.24	4.16–01	4.62–02	1.58+08	2.26+07
4191.440	19913–43764	152	2–1	.06	3.68	1.15+00	2.30–01	4.36+08	1.45+08
4191.680	23052–46902	355	0–1	–.60	3.03	2.54–01	2.54–01	9.63+07	3.21+07
4195.340	26875–50704	693	5–5	.27	3.89	1.86+00	1.69–01	7.04+08	6.40+07
4195.620	24336–48163	478	2–2	–.70	2.92	1.99–01	3.99–02	7.56+07	1.51+07
4196.220	27395–51219	693	3–3	.07	3.69	1.16+00	1.66–01	4.41+08	6.29+07
4196.530	23784–47606	418	5–5	–.39	3.23	4.04–01	3.67–02	1.53+08	1.39+07
4197.100	7986–31805	18	2–3	–3.71	–.09	1.95–04	3.90–05	7.38+04	1.05+04
4198.270	27167–50980	693	4–4	.34	3.97	2.20+00	2.45–01	8.33+08	9.26+07
4198.310	19351–43163	152	5–4	.07	3.69	1.17+00	1.07–01	4.45+08	4.94+07
4198.640	27560–51370	693	2–2	–.01	3.62	9.86–01	1.97–01	3.73+08	7.46+07
4199.100	24575–48383	522	4–5	.84	4.46	6.85+00	7.61–01	2.59+09	2.36+08
4199.970	704–24507	3	2–2	–4.21	–.59	6.17–05	1.23–05	2.33+04	4.66+03
4200.930	27395–51192	689	3–4	–.08	3.55	8.40–01	1.20–01	3.17+08	3.53+07
4202.030	11976–35768	42	4–4	–.25	3.37	5.62–01	6.25–02	2.12+08	2.36+07
4202.760	24575–48362	521	4–4	–2.68	.94	2.07–03	2.30–04	7.80+05	8.67+04
4203.570	8155–31937	19	1–1	–3.22	.40	6.03–04	2.01–04	2.27+05	7.58+04
4203.950	29313–53094	850	6–6	.27	3.89	1.86+00	1.43–01	7.02+08	5.40+07
4203.990	22947–46727	355	1–2	–.22	3.41	6.05–01	2.02–01	2.28+08	4.57+07
4205.550	27560–51331	689	2–2	–.47	3.16	3.40–01	6.80–02	1.28+08	2.57+07
4206.700	416–24181	3	3–3	–3.42	.20	3.80–04	5.43–05	1.43+05	2.05+04
4207.130	22838–46601	352	2–1	–.70	2.92	2.00–01	4.00–02	7.53+07	2.51+07
4208.610	27395–51149	689	3–3	.07	3.70	1.18+00	1.69–01	4.44+08	6.35+07
4210.350	20020–43764	152	1–1	–.19	3.43	6.46–01	2.15–01	2.43+08	8.10+07
4213.650	22947–46673	355	1–0	–.56	3.07	2.76–01	9.21–02	1.04+08	1.04+08
4215.430	22249–45965	274	3–2	–1.03	2.59	9.33–02	1.33–02	3.50+07	7.01+06
4215.970	21716–45428	273	5–4	–1.62	2.00	2.40–02	2.18–03	9.00+06	1.00+06
4216.190	0–23711	3	4–4	–2.98	.64	1.05–03	1.16–04	3.93+05	4.37+04
4217.550	27666–51370	693	1–2	.27	3.90	1.88+00	6.26–01	7.04+08	1.41+08
4219.360	28820–52514	800	5–6	1.01	4.64	1.03+01	9.34–01	3.85+09	2.96+08
4220.050	31686–55376	994	2–1	–.69	2.93	2.03–01	4.07–02	7.61+07	2.54+07
4220.350	24772–48460	482	1–0	–.53	3.09	2.94–01	9.80–02	1.10+08	1.10+08
4222.220	19757–43435	152	3–3	–.35	3.28	4.47–01	6.38–02	1.67+08	2.39+07
4223.730	23784–47453	417	5–4	–1.93	1.70	1.18–02	1.08–03	4.43+06	4.92+05
4224.180	27167–50833	689	4–5	.29	3.91	1.93+00	2.14–01	7.21+08	6.55+07
4224.520	27666–51331	689	1–2	–.26	3.37	5.52–01	1.84–01	2.06+08	4.12+07
4225.460	27560–51219	693	2–3	.28	3.90	1.89+00	3.77–01	7.05+08	1.01+08
4225.720	34040–57698	1102	4–4	–.10	3.52	7.88–01	8.75–02	2.94+08	3.27+07
4225.960	24575–48231	521	4–5	–.56	3.07	2.76–01	3.07–02	1.03+08	9.39+06
4226.430	22947–46601	352	1–1	–.70	2.93	2.00–01	6.66–02	7.46+07	2.49+07
4227.430	26875–50523	693	5–6	1.01	4.64	1.02+01	9.30–01	3.82+09	2.94+08
4228.720	27167–50808	690	4–4	–1.53	2.10	2.98–02	3.31–03	1.11+07	1.23+06
4229.510	26406–50043	649	1–1	–1.38	2.24	4.14–02	1.38–02	1.55+07	5.15+06
4229.540	23784–47420	416	5–5	–1.14	2.49	7.29–02	6.62–03	2.72+07	2.47+06
4229.760	11976–35612	41	4–3	–2.65	.98	2.24–03	2.49–04	8.35+05	1.19+05

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
4230.580	24336–47967	478	2–3	–1.93	1.70	1.19–02	2.38–03	4.43+06	6.32+05
4231.530	26225–49851	647	3–3	.74	4.37	5.48+00	7.83–01	2.04+09	2.92+08
4232.730	888–24507	3	1–2	–4.10	–.47	7.94–05	2.65–05	2.96+04	5.91+03
4233.610	20020–43634	152	1–2	.09	3.72	1.23+00	4.10–01	4.58+08	9.16+07
4235.940	19562–43163	152	4–4	.31	3.94	2.04+00	2.27–01	7.59+08	8.43+07
4237.080	7728–31323	19	3–3	–3.17	.46	6.76–04	9.66–05	2.51+05	3.59+04
4237.680	24339–47930	418	3–4	–1.77	1.86	1.71–02	2.45–03	6.36+06	7.07+05
4238.030	27560–51149	689	2–3	–.05	3.58	8.95–01	1.79–01	3.32+08	4.75+07
4238.820	27395–50980	693	3–4	.60	4.23	4.01+00	5.72–01	1.49+09	1.65+08
4239.370	29372–52954	907	3–3	–.79	2.84	1.62–01	2.32–02	6.02+07	8.60+06
4239.740	23784–47363	416	5–6	–.69	2.94	2.05–01	1.86–02	7.60+07	5.85+06
4239.850	21716–45295	273	5–5	–.82	2.81	1.51–01	1.38–02	5.62+07	5.11+06
4239.960	24772–48351	476a	1–1	–1.81	1.82	1.57–02	5.22–03	5.81+06	1.94+06
4240.370	28605–52181	764	2–1	–.39	3.24	4.08–01	8.17–02	1.51+08	5.05+07
4241.110	22838–46410	351	2–1	–1.65	1.98	2.23–02	4.47–03	8.28+06	2.76+06
4242.590	21999–45563	273	4–3	–1.88	1.75	1.32–02	1.46–03	4.88+06	6.98+05
4242.730	26624–50187	649	2–2	–.80	2.83	1.60–01	3.20–02	5.93+07	1.19+07
4243.370	29357–52916	906	2–2	–.53	3.10	2.94–01	5.87–02	1.09+08	2.18+07
4243.560	29799–53358		4–3	–.92	2.71	1.20–01	1.33–02	4.43+07	6.33+06
4243.790	31323–54880	994	3–2	–.55	3.08	2.81–01	4.02–02	1.04+08	2.08+07
4245.260	23052–46601	352	0–1	–.45	3.18	3.55–01	3.55–01	1.32+08	4.38+07
4245.360	26875–50423	691	5–4	–.44	3.19	3.67–01	3.34–02	1.36+08	1.51+07
4246.020	26406–49951	649	1–0	–1.42	2.21	3.83–02	1.28–02	1.42+07	1.42+07
4246.090	29372–52916	906	3–2	–.17	3.46	6.73–01	9.61–02	2.49+08	4.98+07
4247.320	19788–43326	172	4–3	–1.89	1.74	1.29–02	1.43–03	4.76+06	6.80+05
4247.430	27167–50704	693	4–5	.57	4.20	3.70+00	4.12–01	1.37+09	1.25+08
4248.230	24772–48305	482	1–2	–.51	3.12	3.12–01	1.04–01	1.15+08	2.30+07
4250.120	19913–43435	152	2–3	.25	3.88	1.78+00	3.56–01	6.57+08	9.38+07
4250.790	12561–36079	42	3–3	–.28	3.35	5.25–01	7.50–02	1.94+08	2.77+07
4253.910	29357–52858	905	2–1	–1.00	2.63	1.01–01	2.02–02	3.72+07	1.24+07
4254.940	24339–47834	419	3–3	–1.48	2.15	3.32–02	4.75–03	1.22+07	1.75+06
4255.500	24339–47831	416	3–2	–1.31	2.32	4.91–02	7.02–03	1.81+07	3.62+06
4256.210	27560–51048	690	2–1	–1.20	2.43	6.26–02	1.25–02	2.30+07	7.68+06
4256.320	19621–43109	172	5–4	–2.53	1.10	2.95–03	2.68–04	1.09+06	1.21+05
4256.790	34329–57814	1102	3–3	–.60	3.03	2.49–01	3.56–02	9.18+07	1.31+07
4258.320	704–24181	3	2–3	–3.67	–.04	2.14–04	4.28–05	7.86+04	1.12+04
4258.620	22838–46314	351	2–2	–1.26	2.37	5.47–02	1.09–02	2.01+07	4.03+06
4258.960	24339–47812	419	3–4	–1.21	2.42	6.18–02	8.83–03	2.27+07	2.52+06
4260.000	26875–50342	689	5–6	–.62	3.01	2.41–01	2.19–02	8.84+07	6.80+06
4260.140	24772–48239	476a	1–2	–.71	2.92	1.96–01	6.53–02	7.20+07	1.44+07
4260.480	19351–42816	152	5–5	.63	4.26	4.27+00	3.88–01	1.57+09	1.43+08
4264.210	27167–50611	692	4–3	–.67	2.96	2.16–01	2.40–02	7.92+07	1.13+07
4264.740	31937–55379	993	1–2	–.56	3.07	2.74–01	9.15–02	1.01+08	2.01+07
4265.260	31686–55125	993	2–3	–.30	3.33	4.99–01	9.98–02	1.83+08	2.61+07
4266.970	21999–45428	273	4–4	–.87	2.76	1.35–01	1.50–02	4.94+07	5.49+06
4267.830	25092–48516	482	0–1	–.31	3.32	4.90–01	4.90–01	1.79+08	5.98+07
4268.740	26624–50043	649	2–1	–.54	3.09	2.87–01	5.73–02	1.05+08	3.50+07
4271.160	19757–43163	152	3–4	.25	3.88	1.78+00	2.54–01	6.50+08	7.22+07
4271.760	11976–35379	42	4–5	.20	3.83	1.58+00	1.76–01	5.79+08	5.27+07
4273.870	24772–48163	478	1–2	–1.14	2.49	7.24–02	2.41–02	2.64+07	5.29+06
4275.720	20641–44023	215	4–4	–2.28	1.35	5.25–03	5.83–04	1.91+06	2.13+05
4276.680	31307–54683	976	4–4	–.38	3.26	4.21–01	4.67–02	1.53+08	1.70+07
4277.390	21039–44411	214	2–1	–2.22	1.41	6.03–03	1.21–03	2.20+06	7.32+05
4277.680	19621–42992	172	5–5	–2.65	.98	2.24–03	2.04–04	8.16+05	7.42+04
4278.230	27167–50534	691	4–3	–.99	2.64	1.02–01	1.14–02	3.73+07	5.33+06
4279.480	31323–54683	993	3–4	–.46	3.18	3.50–01	5.00–02	1.27+08	1.42+07
4279.860	23052–46410	351	0–1	–1.65	1.98	2.23–02	2.23–02	8.13+06	2.71+06
4280.530	26106–49461	598	6–5	–1.55	2.08	2.84–02	2.18–03	1.03+07	9.39+05
4282.410	17550–40895	71	3–2	–.16	3.47	6.92–01	9.88–02	2.52+08	5.03+07
4284.420	24119–47453	417	4–4	–1.82	1.82	1.52–02	1.69–03	5.54+06	6.16+05
4285.450	26106–49434	597	6–6	–.36	3.27	4.38–01	3.37–02	1.59+08	1.22+07
4285.830	29357–52683	904	2–2	–.91	2.72	1.24–01	2.48–02	4.49+07	8.99+06
4286.440	23784–47107	414	5–4	–1.73	1.90	1.85–02	1.68–03	6.72+06	7.46+05
4286.870	27560–50880		2–1	–1.15	2.48	7.04–02	1.41–02	2.56+07	8.52+06
4286.990	31805–55125	976	3–3	–.18	3.45	6.58–01	9.40–02	2.39+08	3.41+07
4288.150	22249–45563	273	3–3	–1.10	2.53	7.94–02	1.13–02	2.88+07	4.12+06
4288.970	20875–44184	214	3–2	–1.74	1.89	1.82–02	2.60–03	6.60+06	1.32+06
4289.920	27395–50699		3–2	–.96	2.67	1.09–01	1.56–02	3.96+07	7.92+06
4290.380	24119–47420	416	4–5	–.98	2.66	1.05–01	1.17–02	3.82+07	3.47+06
4290.870	22838–46137	351	2–3	–1.22	2.41	5.99–02	1.20–02	2.17+07	3.10+06

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
4291.470	12561−35856	41	3−2	−1.99	1.64	1.02−02	1.46−03	3.71+06	7.41+05
4291.470	416−23711	3	3−4	−3.51	.12	3.09−04	4.41−05	1.12+05	1.24+04
4292.140	17550−40842	70	3−3	−2.35	1.28	4.47−03	6.38−04	1.62+06	2.31+05
4292.290	17727−41018	70	2−2	−1.96	1.67	1.10−02	2.19−03	3.97+06	7.94+05
4294.130	11976−35257	41	4−4	−.68	2.95	2.09−01	2.32−02	7.56+07	8.40+06
4298.040	24575−47835	520	4−5	−.55	3.08	2.83−01	3.14−02	1.02+08	9.28+06
4299.240	19562−42816	152	4−5	.18	3.81	1.51+00	1.68−01	5.46+08	4.97+07
4300.820	32134−55379	976	2−2	−.29	3.34	5.11−01	1.02−01	1.84+08	3.69+07
4302.190	24575−47812	520	4−4	−.81	2.82	1.55−01	1.72−02	5.59+07	6.21+06
4304.540	23784−47008	414	5−5	−1.16	2.47	6.85−02	6.23−03	2.47+07	2.24+06
4305.200	28605−51826	760	2−3	−1.27	2.36	5.37−02	1.07−02	1.93+07	2.76+06
4305.450	24336−47556	476	2−1	−.47	3.16	3.35−01	6.70−02	1.21+08	4.02+07
4307.900	12561−35768	42	3−4	.32	3.95	2.09+00	2.98−01	7.51+08	8.34+07
4309.040	29313−52514	849	6−6	.00	3.64	1.00+00	7.72−02	3.61+08	2.77+07
4309.380	23784−46982	414	5−6	−.31	3.32	4.84−01	4.40−02	1.74+08	1.34+07
4309.460	25092−48290	471	0−1	−.90	2.74	1.27−01	1.27−01	4.56+07	1.52+07
4310.380	31686−54880	994	2−2	−.53	3.10	2.95−01	5.89−02	1.06+08	2.11+07
4315.090	17727−40895	71	2−2	−.33	3.30	4.68−01	9.35−02	1.68+08	3.35+07
4319.460	21039−44184	214	2−2	−2.51	1.13	3.09−03	6.18−04	1.10+06	2.21+05
4320.380	27395−50534	691	3−3	−1.72	1.92	1.91−02	2.72−03	6.81+06	9.73+05
4320.520	27560−50699	691	2−2	−1.53	2.10	2.94−02	5.88−03	1.05+07	2.10+06
4325.760	12969−36079	42	2−3	.36	4.00	2.29+00	4.58−01	8.17+08	1.17+08
4326.760	23784−46889	413	5−4	−1.84	1.80	1.46−02	1.33−03	5.20+06	5.77+05
4327.100	28605−51708	761	2−2	.02	3.66	1.05+00	2.11−01	3.76+08	7.51+07
4327.920	26628−49727	597	4−4	−.83	2.81	1.49−01	1.66−02	5.31+07	5.90+06
4330.820	24336−47420	475	2−2	−2.29	1.35	5.16−03	1.03−03	1.83+06	3.67+05
4330.960	26351−49434	597	5−6	−1.36	2.28	4.38−02	3.99−03	1.56+07	1.20+06
4337.050	12561−35612	41	3−3	−1.15	2.49	7.08−02	1.01−02	2.51+07	3.59+06
4338.260	17550−40594	70	3−4	−2.09	1.55	8.13−03	1.16−03	2.88+06	3.20+05
4340.490	22249−45282	272	3−2	−2.21	1.43	6.17−03	8.81−04	2.18+06	4.37+05
4341.250	27395−50423	691	3−4	−1.87	1.77	1.36−02	1.95−03	4.83+06	5.37+05
4343.210	26225−49243	544	3−3	−1.68	1.96	2.11−02	3.02−03	7.47+06	1.07+06
4343.260	26225−49243	645	3−2	−1.05	2.59	9.01−02	1.29−02	3.18+07	6.37+06
4343.700	24575−47590	517	4−4	−1.08	2.55	8.24−02	9.16−03	2.91+07	3.24+06
4346.560	26628−49628	598	4−4	−.74	2.90	1.82−01	2.02−02	6.42+07	7.13+06
4347.240	0−22997	2	4−4	−5.01	−1.37	9.77−06	1.09−06	3.45+03	3.83+02
4347.850	29056−52050	828	3−2	−.77	2.87	1.71−01	2.44−02	6.03+07	1.21+07
4348.940	24119−47107	414	4−4	-1.38	2.26	4.14−02	4.60−03	1.46+07	1.62+06
4351.550	24119−47093	413	4−3	−.86	2.78	1.37−01	1.52−02	4.83+07	6.90+06
4352.740	17927−40895	71	1−2	−.56	3.08	2.75−01	9.18−02	9.70+07	1.94+07
4358.500	23784−46721	412	5−4	−.87	2.77	1.35−01	1.23−02	4.76+07	5.29+06
4360.810	29372−52297	903	3−2	−1.05	2.59	8.88−02	1.27−02	3.11+07	6.23+06
4365.900	24119−47017	415	4−3	−1.43	2.21	3.68−02	4.09−03	1.29+07	1.84+06
4367.580	24119−47008	414	4−5	−.47	3.17	3.35−01	3.73−02	1.17+08	1.07+07
4367.910	12969−35856	41	2−2	−2.20	1.44	6.31−03	1.26−03	2.21+06	4.41+05
4369.770	24575−47453	518	4−4	−.15	3.49	7.13−01	7.92−02	2.49+08	2.77+07
4372.990	24336−47197	473	2−2	−1.76	1.88	1.73−02	3.46−03	6.04+06	1.21+06
4373.560	20641−43500	214	4−4	−1.44	2.20	3.63−02	4.03−03	1.27+07	1.41+06
4374.490	26624−49477	648	2−2	−1.15	2.49	7.14−02	1.43−02	2.49+07	4.98+06
4375.930	0−22846	2	4−5	−2.59	1.05	2.57−03	2.86−04	8.95+05	8.14+04
4376.780	24336−47177	471	2−1	−1.27	2.37	5.35−02	1.07−02	1.86+07	6.21+06
4377.790	26406−49243	645	1−2	−1.34	2.31	4.62−02	1.54−02	1.61+07	3.22+06
4382.770	28820−51630	799a	5−5	.01	3.65	1.02+00	9.27−02	3.54+08	3.22+07
4383.550	11976−34782	41	4−5	.51	4.15	3.24+00	3.60−01	1.12+09	1.02+08
4384.680	24336−47136	474	2−2	−1.06	2.58	8.66−02	1.73−02	3.00+07	6.01+06
4385.260	24339−47136	415	3−2	−1.37	2.27	4.24−02	6.06−03	1.47+07	2.94+06
4387.900	24772−47556	476	1−1	−.61	3.03	2.43−01	8.09−02	8.41+07	2.80+07
4388.410	29056−51837	830	3−3	.20	3.84	1.59+00	2.27−01	5.49+08	7.85+07
4389.250	416−23193	2	3−2	−3.90	−.26	1.26−04	1.80−05	4.36+04	8.72+03
4390.460	24119−46889	413	4−4	−1.59	2.06	2.59−02	2.88−03	8.98+06	9.97+05
4390.950	24339−47107	414	3−4	−.62	3.02	2.38−01	3.40−02	8.24+07	9.16+06
4391.880	31686−54449	992	2−1	−.75	2.89	1.76−01	3.53−02	6.10+07	2.03+07
4392.580	31307−54067	973	4−4	−.63	3.01	2.33−01	2.59−02	8.06+07	8.96+06
4395.290	29469−52214	828	2−1	−.88	2.77	1.33−01	2.66−02	4.58+07	1.53+07
4395.510	31323−54067	992	3−2	−.64	3.00	2.28−01	3.26−02	7.87+07	1.57+07
4401.290	29056−51771	828	3−3	−.06	3.58	8.64−01	1.23−01	2.98+08	4.25+07
4401.450	22838−45552	350	2−1	−1.17	2.47	6.76−02	1.35−02	2.33+07	7.76+06
4404.750	12561−35257	41	3−4	.25	3.89	1.78+00	2.54−01	6.11+08	6.79+07
4407.710	17550−40231	68	3−2	−1.17	2.47	6.76−02	9.66−03	2.32+07	4.64+06
4408.420	17727−40405	68	2−1	−.95	2.69	1.12−01	2.24−02	3.85+07	1.28+07

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
4409.120	26624-49298	645	2-1	-1.19	2.45	6.41-02	1.28-02	2.20+07	7.33+06
4415.120	12969-35612	41	2-3	-.13	3.51	7.41-01	1.48-01	2.54+08	3.62+07
4418.430	24119-46745	412	4-3	-1.93	1.72	1.18-02	1.31-03	4.03+06	5.76+05
4422.570	22947-45552	350	1-1	-.22	3.43	6.03-01	2.01-01	2.05+08	6.85+07
4423.140	24119-46721	412	4-4	-1.58	2.07	2.64-02	2.94-03	9.01+06	1.00+06
4423.860	29469-52067	830	2-2	-.80	2.85	1.60-01	3.20-02	5.45+07	1.09+07
4424.190	28605-51201	757	2-2	-1.38	2.27	4.21-02	8.43-03	1.44+07	2.87+06
4425.660	28820-51409	798	5-4	-1.24	2.40	5.70-02	5.18-03	1.94+07	2.16+06
4427.310	416-22997	2	3-4	-2.51	1.14	3.09-03	4.41-04	1.05+06	1.17+05
4430.200	24336-46902	472	2-1	-1.10	2.55	8.02-02	1.60-02	2.73+07	9.08+06
4430.620	17927-40491	68	1-0	-1.02	2.63	9.55-02	3.18-02	3.24+07	3.24+07
4432.570	28820-51374	797	5-5	-.67	2.98	2.16-01	1.96-02	7.33+07	6.66+06
4433.220	29469-52020	830	2-1	.05	3.70	1.13+00	2.25-01	3.82+08	1.27+08
4433.790	29056-51604	825	3-3	-.41	3.23	3.86-01	5.52-02	1.31+08	1.87+07
4435.150	704-23245	2	2-1	-3.79	-.14	1.62-04	3.24-05	5.50+04	1.83+04
4436.920	24575-47107	516	4-4	-1.37	2.27	4.24-02	4.71-03	1.44+07	1.60+06
4438.350	29733-52257	828	1-0	-.78	2.86	1.64-01	5.48-02	5.56+07	5.56+07
4439.640	24575-47093	515	4-3	-1.87	1.77	1.34-02	1.49-03	4.53+06	6.47+05
4439.880	18378-40895	116	2-2	-2.00	1.65	1.00-02	2.00-03	3.38+06	6.77+05
4440.480	29056-51570	829	3-3	-1.00	2.64	9.89-02	1.41-02	3.34+07	4.78+06
4440.840	31937-54449	992	1-1	-.70	2.94	1.98-01	6.59-02	6.69+07	2.23+07
4440.970	26624-49135	645	2-3	-1.71	1.94	1.95-02	3.91-03	6.60+06	9.43+05
4442.340	17727-40231	68	2-2	-.50	3.15	3.16-01	6.32-02	1.07+08	2.14+07
4442.840	17550-40052	69	3-2	-1.89	1.76	1.29-02	1.84-03	4.35+06	8.71+05
4443.200	23052-45552	350	0-1	-.22	3.43	6.03-01	6.03-01	2.04+08	6.79+07
4445.480	704-23193	2	2-2	-4.87	-1.22	1.35-05	2.70-06	4.55+03	9.11+02
4446.840	29733-52214	828	1-1	-.37	3.28	4.30-01	1.43-01	1.45+08	4.83+07
4447.130	17727-40207	69	2-3	-1.89	1.76	1.29-02	2.58-03	4.34+06	6.21+05
4447.720	17927-40405	68	1-1	-.58	3.07	2.63-01	8.77-02	8.87+07	2.96+07
4450.320	25092-47556	476	0-1	-1.29	2.35	5.07-02	5.07-02	1.71+07	5.70+06
4450.760	31307-53769	972	4-4	-1.15	2.49	7.02-02	7.80-03	2.36+07	2.63+06
4452.620	31805-54258	969	3-2	-1.28	2.37	5.27-02	7.53-03	1.77+07	3.55+06
4453.330	26479-48928		1-2	-1.52	2.13	3.04-02	1.01-02	1.02+07	2.05+06
4454.380	22838-45282	350	2-2	-.51	3.14	3.09-01	6.18-02	1.04+08	2.08+07
4454.660	29320-51762	902	1-2	-1.23	2.41	5.84-02	1.95-02	1.96+07	3.92+06
4455.030	31307-53748	947	4-3	-.34	3.31	4.62-01	5.14-02	1.55+08	2.22+07
4456.330	24575-47008	516	4-5	-1.32	2.32	4.74-02	5.26-03	1.59+07	1.45+06
4458.100	31323-53748	992	3-3	-.33	3.32	4.73-01	6.76-02	1.59+08	2.27+07
4459.120	17550-39970	68	3-3	-.50	3.15	3.16-01	4.52-02	1.06+08	1.52+07
4461.200	24336-46745	471	2-3	-1.23	2.42	5.92-02	1.18-02	1.98+07	2.83+06
4461.370	27543-49951	725	1-0	-1.08	2.57	8.38-02	2.79-02	2.81+07	2.81+07
4461.650	704-23111	2	2-3	-2.71	.94	1.95-03	3.90-04	6.53+05	9.33+04
4461.990	29056-51462	825	3-4	-.29	3.36	5.12-01	7.31-02	1.71+08	1.90+07
4463.140	24772-47172	471	1-0	-1.77	1.88	1.69-02	5.64-03	5.66+06	5.66+06
4464.770	24336-46727	472	2-2	-1.39	2.26	4.09-02	8.18-03	1.37+07	2.74+06
4466.550	22838-45221	350	2-3	.18	3.83	1.51+00	3.03-01	5.06+08	7.23+07
4466.940	31686-54067	992	2-2	-.46	3.19	3.45-01	6.90-02	1.15+08	2.31+07
4469.380	29469-51837	830	2-3	.37	4.02	2.35+00	4.69-01	7.84+08	1.12+08
4471.680	888-23245	2	1-1	-5.14	-1.49	7.24-06	2.41-06	2.42+03	8.05+02
4472.720	26351-48703	595	5-4	-1.19	2.46	6.39-02	5.81-03	2.13+07	2.37+06
4476.020	22947-45282	350	1-2	.14	3.79	1.38+00	4.60-01	4.60+08	9.19+07
4476.080	29733-52067	830	1-2	.48	4.14	3.05+00	1.02+00	1.01+09	2.03+08
4478.040	17727-40052	69	2-2	-2.69	.96	2.04-03	4.08-04	6.79+05	1.36+05
4479.610	29733-52050	828	1-2	-.51	3.14	3.11-01	1.04-01	1.03+08	2.07+07
4479.970	32134-54449	974	2-1	-.38	3.27	4.13-01	8.26-02	1.37+08	4.58+07
4480.140	24575-46889	515	4-4	-1.02	2.64	9.64-02	1.07-02	3.20+07	3.56+06
4480.280	29056-51370	823	3-2	-1.26	2.40	5.54-02	7.92-03	1.84+07	3.68+06
4481.620	29733-52040	827	1-1	-.51	3.14	3.11-01	1.04-01	1.03+08	3.44+07
4482.170	888-23193	2	1-2	-2.85	.80	1.41-03	4.71-04	4.69+05	9.38+04
4482.260	17927-40231	68	1-2	-.53	3.12	2.95-01	9.84-02	9.80+07	1.96+07
4482.750	29469-51771	828	2-3	-.31	3.34	4.86-01	9.72-02	1.61+08	2.30+07
4483.780	29372-51668	898	3-4	-1.18	2.47	6.62-02	9.45-03	2.20+07	2.44+06
4484.230	29056-51351	828	3-4	.23	3.88	1.71+00	2.44-01	5.67+08	6.30+07
4485.680	29733-52020	830	1-1	-.21	3.44	6.18-01	2.06-01	2.05+08	6.83+07
4485.980	29469-51755	825	2-1	-1.31	2.34	4.85-02	9.70-03	1.61+07	5.36+06
4487.750	26106-48383	594	6-5	-1.83	1.82	1.47-02	1.13-03	4.85+06	4.41+05
4488.140	29056-51331	819	3-2	-.83	2.82	1.48-01	2.12-02	4.92+07	9.83+06
4488.920	20641-42912	213	4-5	-1.95	1.70	1.12-02	1.25-03	3.71+06	3.38+05
4489.740	978-23245	2	0-1	-3.40	.25	3.98-04	3.98-04	1.32+05	4.39+04
4490.090	24336-46601	469	2-1	-.75	2.90	1.78-01	3.56-02	5.89+07	1.96+07

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
4490.770	31805−54067	974	3−2	−.18	3.47	6.58−01	9.39−02	2.17+08	4.35+07
4492.690	32134−54386	969	2−1	−.48	3.17	3.32−01	6.65−02	1.10+08	3.66+07
4494.570	17727−39970	68	2−3	−.35	3.30	4.47−01	8.93−02	1.47+08	2.11+07
4495.570	29056−51294	827	3−3	−1.12	2.53	7.58−02	1.08−02	2.50+07	3.57+06
4495.970	29469−51705	825	2−2	−.82	2.84	1.52−01	3.05−02	5.03+07	1.01+07
4502.590	28820−51023	796	5−6	−1.27	2.38	5.31−02	4.83−03	1.75+07	1.34+06
4504.840	26340−48532	555	2−3	−1.45	2.20	3.55−02	7.10−03	1.17+07	1.67+06
4507.230	25092−47272		0−1	−2.44	1.21	3.63−03	3.63−03	1.19+06	3.97+05
4509.310	29799−51969	514	4−3	−1.47	2.18	3.37−02	3.75−03	1.11+07	1.58+06
4513.710	20875−43023	213	3−4	−2.59	1.06	2.57−03	3.67−04	8.42+05	9.35+04
4514.190	24575−46721	514	4−4	−1.26	2.40	5.52−02	6.13−03	1.81+07	2.01+06
4515.180	23193−45334	319	2−2	−2.24	1.41	5.75−03	1.15−03	1.88+06	3.77+05
4516.270	29056−51192	819	3−4	−1.75	1.91	1.80−02	2.56−03	5.87+06	6.52+05
4517.530	24772−46902	472	1−1	−1.12	2.54	7.66−02	2.55−02	2.50+07	8.34+06
4518.450	26106−48231	593	6−5	−2.09	1.57	8.16−03	6.28−04	2.67+06	2.42+05
4518.590	17927−40052	69	1−2	−2.90	.76	1.26−03	4.20−04	4.11+05	8.23+04
4520.240	24772−46889	471	1−2	−1.86	1.80	1.39−02	4.64−03	4.55+06	9.09+05
4523.400	29469−51570	829	2−3	−1.03	2.62	9.23−02	1.85−02	3.01+07	4.30+06
4525.140	29056−51149	826	3−2	.17	3.83	1.49+00	2.12−01	4.84+08	9.68+07
4525.870	23245−45334	319	1−2	−2.08	1.58	8.32−03	2.77−03	2.71+06	5.42+05
4526.410	31307−53394	969	4−4	−.90	2.76	1.26−01	1.40−02	4.10+07	4.55+06
4526.560	25092−47177	471	0−1	−1.25	2.40	5.60−02	5.60−02	1.82+07	6.08+06
4527.780	26225−48305	641	3−2	−2.22	1.44	6.08−03	8.68−04	1.98+06	3.95+05
4528.620	17550−39626	68	3−4	−.20	3.46	6.31−01	9.01−02	2.05+08	2.28+07
4529.560	31323−53394	987	3−4	−.41	3.25	3.89−01	5.56−02	1.26+08	1.41+07
4531.150	11976−34040	39	4−4	−1.57	2.09	2.69−02	2.99−03	8.74+06	9.72+05
4531.630	25900−47961	555	4−4	−1.19	2.47	6.52−02	7.25−03	2.12+07	2.35+06
4533.140	26406−48460	641	1−0	−1.63	2.02	2.33−02	7.78−03	7.58+06	7.58+06
4533.950	23784−45833		5−4	−2.26	1.40	5.50−03	5.00−04	1.78+06	1.98+05
4536.510	29372−51409	896	3−4	−1.65	2.00	2.22−02	3.17−03	7.19+06	7.99+05
4537.680	26351−48383	594	5−5	−1.90	1.75	1.25−02	1.13−03	4.04+06	3.67+05
4538.760	18378−40405	115	2−1	−2.81	.85	1.55−03	3.10−04	5.01+05	1.67+05
4538.840	31805−53831	969	3−3	−.86	2.80	1.38−01	1.98−02	4.48+07	6.40+06
4541.320	26225−48239		3−2	−1.87	1.79	1.35−02	1.94−03	4.38+06	8.76+05
4541.950	26351−48362	593	5−4	−2.07	1.58	8.42−03	7.65−04	2.72+06	3.02+05
4542.420	29357−51365	894	2−3	−1.07	2.59	8.58−02	1.72−02	2.77+07	3.96+06
4542.720	29733−51740	827	1−2	−1.30	2.36	5.07−02	1.69−02	1.64+07	3.28+06
4546.480	33765−55754	1047	2−2	−1.06	2.60	8.69−02	1.74−02	2.80+07	5.61+06
4547.020	12561−34547	39	3−2	−2.84	.82	1.45−03	2.06−04	4.66+05	9.33+04
4547.850	28605−50587	755	2−3	.01	3.67	1.03+00	2.06−01	3.32+08	4.75+07
4551.670	31805−53769	972	3−4	−.99	2.66	1.01−01	1.45−02	3.27+07	3.63+06
4554.460	23111−45061	319	3−3	−2.00	1.66	1.00−02	1.43−03	3.22+06	4.59+05
4556.130	29056−50999	410	3−2	−.03	3.63	9.42−01	1.35−01	3.03+08	6.05+07
4556.940	26225−48163	638	3−2	−1.75	1.91	1.78−02	2.54−03	5.71+06	1.14+06
4558.110	29372−51305	894	3−4	−1.35	2.31	4.47−02	6.38−03	1.43+07	1.59+06
4560.100	29056−50980	823	3−4	−1.07	2.59	8.57−02	1.22−02	2.75+07	3.05+06
4561.430	22249−44166		3−3	−2.33	1.33	4.68−03	6.68−04	1.50+06	2.14+05
4564.710	29469−51370	823	2−2	−1.27	2.39	5.42−02	1.08−02	1.73+07	3.47+06
4564.830	24772−46673	472	1−0	−1.83	1.83	1.48−02	4.95−03	4.75+06	4.75+06
4565.320	26406−48305	641	1−2	−1.62	2.04	2.42−02	8.06−03	7.74+06	1.55+06
4565.670	26140−48037	554	3−2	−1.42	2.24	3.77−02	5.39−03	1.21+07	2.41+06
4566.520	26624−48516	641	2−1	−1.29	2.37	5.13−02	1.03−02	1.64+07	5.47+06
4566.990	27543−49433	723	1−2	−1.72	1.94	1.91−02	6.38−03	6.12+06	1.22+06
4568.610	31686−53569	989	2−2	−1.58	2.08	2.64−02	5.29−03	8.45+06	1.69+06
4568.790	26340−48221	554	2−1	−1.58	2.08	2.64−02	5.28−03	8.43+06	2.81+06
4568.840	29320−51201	894	1−2	−1.29	2.37	5.18−02	1.73−02	1.66+07	3.31+06
4571.450	23193−45061	319	2−3	−2.29	1.37	5.13−03	1.03−03	1.64+06	2.34+05
4572.850	29469−51331	819	2−2	−1.66	2.00	2.20−02	4.39−03	7.01+06	1.40+06
4574.240	25900−47756	554	4−3	−1.63	2.03	2.34−02	2.60−03	7.47+06	1.07+06
4574.720	18378−40231	115	2−2	−2.06	1.60	8.71−03	1.74−03	2.78+06	5.55+05
4575.800	26628−48476	593	4−3	−1.91	1.75	1.23−02	1.36−03	3.91+06	5.58+05
4579.060	26406−48239	640	1−2	−2.05	1.61	8.95−03	2.98−03	2.85+06	5.69+05
4579.340	22846−44677	319	5−4	−2.17	1.49	6.76−03	6.15−04	2.15+06	2.39+05
4579.690	29372−51201	894	3−2	−1.88	1.79	1.33−02	1.90−03	4.24+06	8.47+05
4579.820	24772−46601	469	1−1	−2.03	1.63	9.35−03	3.12−03	2.97+06	9.91+05
4580.600	29469−51294	827	2−3	−1.15	2.51	7.07−02	1.41−02	2.25+07	3.21+06
4581.520	26140−47961	555	3−4	−1.01	2.66	9.87−02	1.41−02	3.14+07	3.49+06
4582.940	22947−44761	348	1−1	−2.67	.99	2.14−03	7.13−04	6.79+05	2.26+05
4583.720	25092−46902	472	0−1	−1.96	1.71	1.11−02	1.11−02	3.51+06	1.17+06
4584.720	29056−50534	820	3−3	−1.25	2.41	5.63−02	8.04−03	1.79+07	2.55+06

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
4584.820	29056–50861	822	3–2	−1.01	2.65	9.70−02	1.39−02	3.08+07	6.15+06
4587.130	28820–50614	795	5–4	−.80	2.87	1.60−01	1.46−02	5.07+07	5.64+06
4587.730	32134–53925	971	2–1	−1.30	2.36	4.98−02	9.97−03	1.58+07	5.26+06
4591.500	22249–44023		3–4	−2.30	1.36	5.01−03	7.16−04	1.59+06	1.76+05
4592.660	12561–34329	39	3–3	−1.91	1.75	1.23−02	1.76−03	3.89+06	5.56+05
4593.540	31805–53569	971	3–2	−1.01	2.65	9.82−02	1.40−02	3.11+07	6.21+06
4594.960	26406–48163	638	1–2	−2.38	1.28	4.17−03	1.39−03	1.32+06	2.63+05
4595.210	29313–51069	846	6–5	−1.65	2.01	2.23−02	1.71−03	7.03+06	6.39+05
4595.360	26628–48383	594	4–5	−.93	2.73	1.16−01	1.29−02	3.68+07	3.34+06
4596.060	29056–50808	820	3–4	−.75	2.92	1.79−01	2.56−02	5.67+07	6.30+06
4596.430	29469–51219	823	2–3	−1.38	2.28	4.13−02	8.25−03	1.30+07	1.86+06
4598.120	26479–48221	554	1–1	−.68	2.98	2.10−01	6.99−02	6.61+07	2.20+07
4598.370	7728–29469	970	3–2	−4.61	−.95	2.45−05	3.51−06	7.74+03	1.55+03
4598.730	29469–51208	819	2–1	−1.62	2.05	2.43−02	4.85−03	7.65+06	2.55+06
4600.940	26106–47835	591	6–5	−1.68	1.98	2.10−02	1.61−03	6.60+06	6.00+05
4602.000	12969–34692	39	2–1	−2.50	1.16	3.16−03	6.32−04	9.96+05	3.32+05
4602.940	11976–33695	39	4–5	−1.46	2.20	3.47−02	3.85−03	1.09+07	9.92+05
4603.350	22947–44664	348	1–2	−2.22	1.44	6.03−03	2.01−03	1.90+06	3.79+05
4603.960	24119–45833	410	4–4	−2.16	1.50	6.92−03	7.69−04	2.18+06	2.42+05
4604.250	22838–44551	348	2–3	−2.77	.89	1.70−03	3.40−04	5.34+05	7.63+04
4604.850	29313–51023	846	6–6	−1.67	1.99	2.11−02	1.63−03	6.65+06	5.12+05
4607.660	26340–48037	554	2–2	−.64	3.02	2.27−01	4.54−02	7.14+07	1.43+07
4611.080	26624–48305	641	2–2	−2.09	1.58	8.20−03	1.64−03	2.57+06	5.14+05
4611.280	29469–51149	826	2–2	.01	3.68	1.03+00	2.06−01	3.22+08	6.45+07
4613.210	26550–48221	554	0–1	−.86	2.81	1.38−01	1.38−01	4.34+07	1.45+07
4614.220	26624–48290	638	2–1	−1.73	1.94	1.88−02	3.75−03	5.88+06	1.96+06
4618.760	23784–45428	409	5–4	−1.28	2.38	5.25−02	4.77−03	1.64+07	1.82+06
4619.290	29056–50699	821	3–2	−.26	3.40	5.48−01	7.82−02	1.71+08	3.42+07
4620.140	24772–46410	468	1–1	−2.46	1.20	3.46−03	1.15−03	1.08+06	3.60+05
4625.050	26140–47756	554	3–3	−.62	3.04	2.40−01	3.42−02	7.47+07	1.07+07
4627.530	26628–48231		4–5	−1.89	1.78	1.29−02	1.44−03	4.03+06	3.66+05
4630.120	18378–39970	115	2–3	−1.83	1.84	1.48−02	2.96−03	4.60+06	6.57+05
4631.500	35257–56843	1152	4–4	−.83	2.84	1.48−01	1.65−02	4.61+07	5.12+06
4632.820	29469–51048	820	2–1	−1.05	2.61	8.84−02	1.77−02	2.75+07	9.16+06
4632.920	12969–34547	39	2–2	−2.31	1.36	4.90−03	9.80−04	1.52+06	3.04+05
4633.760	24339–45914	410	3–3	−2.06	1.61	8.71−03	1.24−03	2.71+06	3.87+05
4634.170	22838–44411		2–1	−2.88	.79	1.32−03	2.64−04	4.09+05	1.36+05
4635.630	23111–44677	319	3–4	−2.49	1.18	3.24−03	4.62−04	1.00+06	1.12+05
4635.850	22947–44512	349	1–2	−1.46	2.21	3.47−02	1.16−02	1.08+07	2.15+06
4637.510	26479–48037	554	1–2	−.58	3.08	2.61−01	8.70−02	8.09+07	1.62+07
4638.020	29056–50611	822	3–3	−.24	3.43	5.81−01	8.30−02	1.80+08	2.57+07
4643.220	11976–33507	38	4–3	−4.43	−.76	3.72−05	4.13−06	1.15+04	1.64+03
4643.470	29469–50999	820	2–2	−.46	3.21	3.50−01	7.00−02	1.08+08	2.16+07
4647.440	21716–45295	409	5–5	−.47	3.20	3.39−01	3.08−02	1.05+08	9.51+06
4649.830	26106–47606	592	6–5	−1.86	1.80	1.37−02	1.05−03	4.22+06	3.84+05
4654.500	12561–34040	38	3–4	−2.18	1.49	6.61−03	9.44−04	2.03+06	2.26+05
4654.630	25900–47378	554	4–4	−.31	3.36	4.92−01	5.46−02	1.51+08	1.68+07
4657.600	22947–44411	346	1–1	−1.91	1.76	1.23−02	4.10−03	3.78+06	1.26+06
4658.290	26351–47812	591	5–4	−1.92	1.75	1.20−02	1.10−03	3.70+06	4.11+05
4661.540	36767–58213	1207	3–2	.04	3.71	1.10+00	1.58−01	3.39+08	6.78+07
4661.980	24119–45563	409	4–3	−1.45	2.22	3.55−02	3.94−03	1.09+07	1.56+06
4663.180	28605–50043	754	2–1	−1.34	2.33	4.54−02	9.09−03	1.39+07	4.65+06
4665.550	32874–54301	1044	4–4	−1.27	2.39	5.31−02	5.90−03	1.63+07	1.81+06
4667.460	29056–50475	822	3–4	.06	3.73	1.14+00	1.63−01	3.50+08	3.88+07
4668.140	26340–47756	554	2–3	−.29	3.38	5.12−01	1.02−01	1.57+08	2.24+07
4669.170	29469–50880	821	2–1	−.42	3.25	3.78−01	7.56−02	1.16+08	3.86+07
4672.840	12969–34363	40	2–1	−3.87	−.20	1.35−04	2.70−05	4.12+04	1.37+04
4673.170	29469–50862	820	2–3	−.40	3.27	3.95−01	7.90−02	1.21+08	1.72+07
4673.280	29469–50861	822	2–2	−.90	2.77	1.25−01	2.50−02	3.82+07	7.63+06
4674.660	12561–33947	40	3–2	−3.52	.15	3.02−04	4.31−05	9.22+04	1.84+04
4677.600	33507–54880	1072	3–2	−1.01	2.66	9.75−02	1.39−02	2.97+07	5.95+06
4678.850	29056–50423	821	3–4	.15	3.83	1.43+00	2.04−01	4.35+08	4.84+07
4679.230	27167–48532	688	4–3	−1.24	2.43	5.76−02	6.40−03	1.75+07	2.51+06
4680.300	12969–34329	39	2–3	−3.05	.62	8.91−04	1.78−04	2.71+05	3.88+04
4680.480	23052–44411	346	0–1	−1.93	1.74	1.17−02	1.17−02	3.58+06	1.19+06
4682.580	23711–45061	384	4–3	−2.06	1.61	8.71−03	9.68−04	2.65+06	3.78+05
4683.560	22838–44184	346	2–2	−1.55	2.12	2.82−02	5.64−03	8.57+06	1.71+06
4685.040	22947–44285	347	1–2	−2.28	1.39	5.25−03	1.75−03	1.59+06	3.19+05
4687.310	7728–29056	17	3–3	−4.37	−.70	4.27−05	6.09−06	1.30+04	1.85+03
4687.390	22838–44166	347	2–3	−1.76	1.91	1.74−02	3.48−03	5.28+06	7.54+05

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
4687.680	23052-44378	347	0-1	-2.72	.95	1.91-03	1.91-03	5.78+05	1.93+05
4688.380	33802-55125	1071	2-3	-1.00	2.67	9.96-02	1.99-02	3.02+07	4.32+06
4690.150	29733-51048	820	1-1	-.65	3.02	2.22-01	7.40-02	6.73+07	2.24+07
4690.380	8155-29469	17	1-2	-4.33	-.66	4.68-05	1.56-05	1.42+04	2.84+03
4691.410	24119-45428	409	4-4	-.59	3.08	2.57-01	2.86-02	7.79+07	8.66+06
4700.170	29799-51069	935	4-5	-.85	2.82	1.40-01	1.56-02	4.24+07	3.86+06
4701.050	29733-50999	820	1-2	-1.10	2.58	8.01-02	2.67-02	2.42+07	4.84+06
4704.960	29733-50981	821	1-0	-.55	3.13	2.84-01	9.46-02	8.55+07	8.55+07
4705.460	28605-49851	752	2-3	-1.19	2.48	6.44-02	1.29-02	1.94+07	2.77+06
4707.280	26140-47378	554	3-4	-.23	3.44	5.91-01	8.45-02	1.78+08	1.98+07
4707.490	22947-44184	346	1-2	-1.30	2.37	5.01-02	1.67-02	1.51+07	3.02+06
4708.970	29357-50587	889	2-3	-.80	2.88	1.60-01	3.19-02	4.80+07	6.86+06
4709.090	29469-50699	821	2-2	-.45	3.22	3.54-01	7.07-02	1.06+08	2.13+07
4710.290	24339-45563	409	3-3	-.74	2.93	1.82-01	2.60-02	5.47+07	7.82+06
4712.100	24336-45552	467	2-1	-2.06	1.61	8.71-03	1.74-03	2.62+06	8.72+05
4714.070	36767-57974	1206	3-2	-.24	3.43	5.77-01	8.25-02	1.73+08	3.46+07
4714.180	26628-47834	591	4-3	-1.89	1.78	1.29-02	1.44-03	3.88+06	5.54+05
4721.000	24119-45295	1071	4-5	-1.69	1.98	2.04-02	2.27-03	6.11+06	5.55+05
4725.940	34637-55791	1134	2-3	-1.00	2.68	1.00-01	2.01-02	3.00+07	4.28+06
4726.160	24181-45334	384	3-2	-2.02	1.65	9.55-03	1.36-03	2.85+06	5.70+05
4727.000	26406-47556	635	1-1	-2.25	1.42	5.56-03	1.85-03	1.66+06	5.53+05
4727.400	29733-50880	821	1-1	-.41	3.26	3.87-01	1.29-01	1.15+08	3.85+07
4728.560	29469-50611	822	2-3	-.37	3.31	4.31-01	8.61-02	1.28+08	1.84+07
4729.030	32874-54014	1043a	4-5	-.40	3.28	4.02-01	4.46-02	1.20+08	1.09+07
4729.700	27395-48532	688	3-3	-1.65	2.03	2.24-02	3.20-03	6.68+06	9.54+05
4733.600	11976-33096	38	4-4	-2.38	1.30	4.17-03	4.63-04	1.24+06	1.38+05
4734.100	34637-55754	1133	2-2	-.28	3.39	5.23-01	1.05-01	1.56+08	3.11+07
4735.850	32874-53983	1042	4-5	-.05	3.63	8.95-01	9.94-02	2.66+08	2.42+07
4736.780	25900-47006	554	4-5	-.02	3.65	9.45-01	1.05-01	2.81+08	2.55+07
4737.630	26351-47453	590	5-4	-1.52	2.16	3.04-02	2.77-03	9.04+06	1.00+06
4740.340	24339-45428	409	3-4	-1.69	1.99	2.04-02	2.92-03	6.06+06	6.73+05
4741.080	26875-47961	688	5-4	-1.58	2.10	2.66-02	2.42-03	7.89+06	8.76+05
4741.530	22838-43923	346	2-3	-1.17	2.51	6.76-02	1.35-02	2.01+07	2.87+06
4745.130	17927-38996	67	1-1	-3.01	.67	9.77-04	3.26-04	2.89+05	9.65+04
4745.810	29469-50534	821	2-3	-.44	3.24	3.63-01	7.27-02	1.08+08	1.54+07
4749.580	12969-34017		2-1	-4.13	-.45	7.41-05	1.48-05	2.19+04	7.31+03
4749.930	36767-57814	1206	3-3	-.24	3.43	5.71-01	8.16-02	1.69+08	2.41+07
4757.580	34363-55376	634	1-1	.03	3.71	1.07+00	3.56-01	3.14+08	1.05+08
4765.480	12969-33947	40	2-2	-3.35	.33	4.47-04	8.93-05	1.31+05	2.62+04
4766.880	27560-48532	688	2-3	-1.57	2.11	2.69-02	5.39-03	7.91+06	1.13+06
4768.330	29733-50699	821	1-2	-.68	3.00	2.08-01	6.94-02	6.11+07	1.22+07
4768.400	23711-44677	384	4-4	-1.57	2.11	2.69-02	2.99-03	7.90+06	8.77+05
4771.700	17727-38678	67	2-2	-2.55	1.13	2.82-03	5.64-04	8.26+05	1.65+05
4772.820	24336-45282	38	2-2	-1.05	2.63	8.91-02	1.78-02	2.61+07	5.22+06
4776.070	26624-47556	635	2-1	-1.73	1.94	1.84-02	3.68-03	5.39+06	1.80+06
4776.340	36767-57698	1206	3-4	-.37	3.31	4.23-01	6.04-02	1.24+08	1.37+07
4779.440	27543-48460	720	1-0	-1.38	2.30	4.15-02	1.38-02	1.21+07	1.21+07
4780.820	26624-47136	633	2-2	-2.21	1.47	6.13-03	1.23-03	1.79+06	3.58+05
4785.960	33413-54301	1044	3-4	-.66	3.02	2.16-01	3.09-02	6.30+07	7.00+06
4786.810	24336-45221	467	2-3	-.78	2.90	1.66-01	3.32-02	4.83+07	6.90+06
4787.840	24181-45061	384	3-3	-1.78	1.90	1.66-02	2.37-03	4.83+06	6.90+05
4788.760	26106-46982	588	6-6	-.93	2.75	1.16-01	8.94-03	3.38+07	2.60+06
4789.650	28605-49477	753	2-2	-.19	3.49	6.51-01	1.30-01	1.89+08	3.79+07
4791.250	26406-47272	633	1-1	-1.68	2.00	2.09-02	6.96-03	6.07+06	2.02+06
4793.950	24575-45428	512	4-4	-2.55	1.13	2.82-03	3.13-04	8.18+05	9.09+04
4794.360	19552-40405	115	1-1	-2.95	.73	1.12-03	3.74-04	3.26+05	1.09+05
4798.270	33765-54600	1042	2-3	-.41	3.27	3.87-01	7.74-02	1.12+08	1.60+07
4798.740	12969-33802	38	2-2	-2.97	.71	1.07-03	2.14-04	3.10+05	6.21+04
4799.410	29357-50187	888	2-2	-1.20	2.49	6.37-02	1.27-02	1.84+07	3.69+06
4800.140	24507-45334	384	2-2	-2.34	1.34	4.57-03	9.14-04	1.32+06	2.65+05
4800.650	33413-54237	1042	3-4	-.26	3.42	5.50-01	7.86-02	1.59+08	1.77+07
4802.880	29372-50187	888	3-2	-.76	2.93	1.75-01	2.51-02	5.07+07	1.01+07
4804.530	28820-49628	794	5-4	-1.52	2.16	3.02-02	2.74-03	8.72+06	9.69+05
4807.240	34329-55125	634	3-3	-1.28	2.40	5.23-02	7.47-03	1.51+07	2.16+06
4807.720	27167-47961	688	4-4	-1.37	2.32	4.31-02	4.79-03	1.24+07	1.38+06
4808.160	26225-47017	633	3-3	-1.85	1.83	1.40-02	2.00-03	4.04+06	5.77+05
4809.150	29799-50587	933	4-3	-1.69	2.00	2.06-02	2.28-03	5.93+06	8.47+05
4809.260	32874-53661	1039	4-3	-1.51	2.17	3.08-02	3.42-03	8.89+06	1.27+06
4809.950	28820-49604	793	5-5	-1.82	1.86	1.51-02	1.37-03	4.35+06	3.96+05
4811.040	24772-45552	467	1-1	-2.34	1.34	4.57-03	1.52-03	1.32+06	4.39+05

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
4813.120	26406−47177	630	1−1	−1.95	1.73	1.12−02	3.72−03	3.22+06	1.07+06
4815.230	27543−48305	720	1−2	−2.18	1.51	6.66−03	2.22−03	1.92+06	3.83+05
4817.770	17927−38678	67	1−2	−2.69	.99	2.04−03	6.81−04	5.87+05	1.17+05
4824.160	29320−50043	688	1−1	−1.27	2.41	5.34−02	1.78−02	1.53+07	5.10+06
4832.730	29357−50043	888	2−1	−1.13	2.55	7.37−02	1.47−02	2.10+07	7.02+06
4834.510	19552−40231	115	1−2	−2.68	1.00	2.09−03	6.96−04	5.96+05	1.19+05
4835.860	33096−53769	1068	4−4	−.77	2.91	1.68−01	1.87−02	4.80+07	5.34+06
4838.090	26225−46889	630	3−2	−2.54	1.15	2.91−03	4.16−04	8.29+05	1.66+05
4838.520	27560−48221	687	2−1	−1.37	2.32	4.28−02	8.56−03	1.22+07	4.06+06
4839.550	26351−47008	588	5−5	−1.29	2.39	5.08−02	4.62−03	1.45+07	1.31+06
4840.320	33507−54161	1068	3−3	−.63	3.06	2.37−01	3.39−02	6.75+07	9.64+06
4841.680	26624−47272	633	2−1	−2.58	1.10	2.63−03	5.26−04	7.48+05	2.49+05
4841.800	33802−54449	1070	2−1	−1.13	2.55	7.35−02	1.47−02	2.09+07	6.97+06
4842.790	33096−53739	1069	4−5	−.96	2.73	1.11−01	1.23−02	3.15+07	2.86+06
4843.160	27395−48037	687	3−2	−1.28	2.40	5.20−02	7.44−03	1.48+07	2.96+06
4844.000	28605−49243	750	2−3	−1.43	2.26	3.75−02	7.51−03	1.07+07	1.52+06
4845.660	26351−46982	588	5−6	−1.72	1.96	1.88−02	1.71−03	5.35+06	4.12+05
4848.880	18378−38996	114	2−1	−2.79	.90	1.62−03	3.24−04	4.60+05	1.53+05
4849.660	28820−49434	793	5−6	−2.22	1.47	6.05−03	5.50−04	1.72+06	1.32+05
4854.890	33413−54005	1043	3−3	−1.38	2.31	4.20−02	6.00−03	1.19+07	1.70+06
4855.680	27167−47756	687	4−3	−1.32	2.37	4.78−02	5.31−03	1.35+07	1.93+06
4859.140	33802−54376	1068	2−2	−.84	2.85	1.45−01	2.90−02	4.09+07	8.18+06
4859.750	23193−43764	318	2−1	−.33	3.36	4.68−01	9.35−02	1.32+08	4.40+07
4860.990	27395−47961	688	3−4	−1.78	1.91	1.68−02	2.40−03	4.73+06	5.26+05
4862.550	33507−54067	1070	3−2	−1.05	2.63	8.87−02	1.27−02	2.50+07	5.00+06
4863.650	27666−48221	687	1−1	−1.19	2.50	6.48−02	2.16−02	1.83+07	6.09+06
4871.320	23111−43634	318	3−2	.11	3.80	1.29+00	1.84−01	3.62+08	7.24+07
4871.940	26225−46745	630	3−3	−1.47	2.22	3.41−02	4.87−03	9.57+06	1.37+06
4872.140	23245−43764	318	1−1	−.05	3.64	8.91−01	2.97−01	2.50+08	8.35+07
4873.750	26624−47136	633	2−2	−2.11	1.58	7.72−03	1.54−03	2.17+06	4.34+05
4874.360	24772−45282	467	1−2	−2.21	1.48	6.17−03	2.06−03	1.73+06	3.46+05
4875.900	26875−47378	687	5−4	−1.39	2.30	4.09−02	3.72−03	1.15+07	1.28+06
4877.590	24181−44677	384	3−4	−2.22	1.47	6.03−03	8.61−04	1.69+06	1.88+05
4878.220	23270−43764	318	0−1	−.54	3.15	2.88−01	2.88−01	8.08+07	2.69+07
4881.730	26628−47107	588	4−4	−1.25	2.44	5.59−02	6.21−03	1.56+07	1.74+06
4882.150	27560−48037	687	2−2	−1.08	2.61	8.25−02	1.65−02	2.31+07	4.62+06
4885.440	31307−51771	966	4−3	−.67	3.02	2.12−01	2.36−02	5.93+07	8.47+06
4886.340	33507−53967	1066	3−2	−.15	3.54	7.09−01	1.01−01	1.98+08	3.96+07
4887.190	33802−54258	1065	2−2	−.57	3.12	2.70−01	5.41−02	7.55+07	1.51+07
4888.650	33096−53546	1066	4−3	−.34	3.35	4.58−01	5.09−02	1.28+08	1.83+07
4889.010	17727−38175	67	2−3	−2.30	1.39	5.01−03	1.00−03	1.40+06	2.00+05
4889.110	31323−51771	985	3−3	−.07	3.62	8.44−01	1.21−01	2.36+08	3.37+07
4890.760	23193−43634	318	2−2	−.09	3.60	8.13−01	1.63−01	2.27+08	4.53+07
4891.500	22997−43435	318	4−3	.17	3.86	1.48+00	1.64−01	4.12+08	5.89+07
4892.870	34017−54449	1070	1−1	−.43	3.26	3.68−01	1.23−01	1.03+08	3.42+07
4896.440	31323−51740	984	3−2	−.89	2.80	1.30−01	1.86−02	3.62+07	7.25+06
4903.320	23245−43634	318	1−2	−.60	3.09	2.51−01	8.37−02	6.97+07	1.39+07
4905.150	31686−52067	986	2−2	−1.36	2.33	4.41−02	8.81−03	1.22+07	2.44+06
4907.740	27666−48037	687	1−2	−1.31	2.38	4.86−02	1.62−02	1.35+07	2.69+06
4908.060	34017−54386		1−1	−.95	2.74	1.13−01	3.75−02	3.12+07	1.04+07
4909.390	31686−52050	985	2−2	−.71	2.98	1.96−01	3.93−02	5.43+07	1.09+07
4910.030	27395−47756	687	3−3	−.93	2.76	1.17−01	1.68−02	3.25+07	4.64+06
4910.330	33802−54161	1068	2−3	−.27	3.43	5.43−01	1.09−01	1.50+08	2.15+07
4910.570	34017−54376	1068	1−2	−.32	3.37	4.79−01	1.60−01	1.33+08	2.65+07
4911.540	34329−54683	1098	3−4	−.94	2.76	1.16−01	1.66−02	3.20+07	3.56+06
4911.790	31686−52040	984	2−1	−1.00	2.69	1.01−01	2.01−02	2.78+07	9.27+06
4917.240	33802−54132	1066	2−1	−.47	3.22	3.41−01	6.82−02	9.40+07	3.13+07
4918.020	34122−54449	1070	0−1	−.48	3.21	3.28−01	3.28−01	9.05+07	3.02+07
4919.000	23111−43435	318	3−3	.02	3.71	1.05+00	1.50−01	2.89+08	4.12+07
4920.510	22846−43163	318	5−4	.30	3.99	2.00+00	1.81−01	5.50+08	6.11+07
4924.780	18378−38678	114	2−2	−1.88	1.81	1.32−02	2.64−03	3.63+06	7.25+05
4925.290	33096−53394	1065	4−4	−1.24	2.45	5.76−02	6.39−03	1.58+07	1.76+06
4927.450	28820−49109	792	5−4	−1.35	2.34	4.46−02	4.06−03	1.23+07	1.36+06
4930.330	31937−52214	985	1−1	−.71	2.99	1.96−01	6.55−02	5.39+07	1.80+07
4933.190	33802−54067	1070	2−2	−.96	2.73	1.09−01	2.18−02	2.99+07	5.98+06
4933.350	34122−54386	1065	0−1	−.11	3.58	7.79−01	7.79−01	2.13+08	7.12+07
4933.880	31805−52067	968	3−2	−1.12	2.58	7.66−02	1.09−02	2.10+07	4.20+06
4934.020	33507−53769	1068	3−4	−.23	3.46	5.84−01	8.34−02	1.60+08	1.78+07
4938.180	31805−52050	966	3−2	−.51	3.19	3.11−01	4.45−02	8.51+07	1.70+07
4938.820	23193−43435	318	2−3	−.62	3.07	2.40−01	4.80−02	6.56+07	9.37+06

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
4939.240	33507–53748	1065	3–3	–.26	3.44	5.56–01	7.94–02	1.52+08	2.17+07
4939.690	6928–27167	16	5–4	–3.18	.51	6.61–04	6.01–05	1.81+05	2.01+04
4945.630	33947–54161	1113	2–3	–.86	2.84	1.40–01	2.79–02	3.81+07	5.44+06
4946.390	27167–47378	687	4–4	–.74	2.96	1.83–01	2.03–02	4.98+07	5.53+06
4950.110	27560–47756	687	2–3	–1.07	2.62	8.50–02	1.70–02	2.31+07	3.31+06
4952.650	33096–53282	1068	4–5	–.73	2.97	1.87–01	2.08–02	5.09+07	4.63+06
4957.300	22997–43163	318	4–4	–.09	3.61	8.13–01	9.03–02	2.21+08	2.45+07
4957.600	22650–42816	318	6–5	.38	4.08	2.40+00	1.85–01	6.51+08	5.92+07
4961.910	29313–49461	845	6–5	–1.54	2.16	2.90–02	2.23–03	7.87+06	7.15+05
4962.560	33695–53841	1097	5–6	–.52	3.18	3.03–01	2.76–02	8.21+07	6.31+06
4966.100	26875–47006	687	5–5	–.30	3.39	4.96–01	4.51–02	1.34+08	1.22+07
4967.900	33802–53925	1067	2–1	–.21	3.48	6.13–01	1.23–01	1.66+08	5.52+07
4968.700	29357–49477	887	2–2	–1.10	2.60	8.01–02	1.60–02	2.16+07	4.33+06
4969.930	34017–54132	1066	1–1	–.19	3.51	6.50–01	2.17–01	1.75+08	5.85+07
4970.490	29320–49433	883	1–2	–1.03	2.67	9.37–02	3.12–02	2.53+07	5.06+06
4970.650	31937–52050	985	1–2	–1.06	2.64	8.77–02	2.92–02	2.37+07	4.74+06
4973.110	31937–52040	984	1–1	–.23	3.47	5.92–01	1.97–01	1.60+08	5.32+07
4975.420	32134–52214	586	2–1	–1.35	2.35	4.50–02	9.00–03	1.21+07	4.04+06
4977.650	31686–51771	985	2–3	–1.23	2.46	5.84–02	1.17–02	1.57+07	2.25+06
4978.610	32134–52214	966	2–1	–.37	3.33	4.30–01	8.59–02	1.16+08	3.85+07
4979.590	29357–49433	883	2–2	–1.78	1.92	1.67–02	3.33–03	4.48+06	8.97+05
4982.510	33096–53161	1067	4–3	.40	4.10	2.54+00	2.82–01	6.81+08	9.73+07
4983.260	33507–53569	1067	3–2	.24	3.94	1.75+00	2.50–01	4.69+08	9.38+07
4983.860	33096–53155	1066	4–4	.38	4.08	2.42+00	2.69–01	6.50+08	7.22+07
4985.260	31686–51740	984	2–2	–.06	3.64	8.81–01	1.76–01	2.36+08	4.73+07
4985.550	23111–43163	318	3–4	–1.03	2.67	9.33–02	1.33–02	2.50+07	2.78+06
4986.220	34017–54067	1070	1–2	–.69	3.01	2.03–01	6.77–02	5.45+07	1.09+07
4988.960	33507–53546	1066	3–3	–.11	3.59	7.77–01	1.11–01	2.08+08	2.98+07
4991.280	33802–53831	1065	2–3	–.07	3.63	8.53–01	1.71–01	2.28+08	3.26+07
4993.690	33947–53967	1111	2–2	–.75	2.95	1.78–01	3.56–02	4.76+07	9.53+06
4994.130	7377–27395	16	4–3	–2.90	.80	1.26–03	1.40–04	3.37+05	4.81+04
4999.110	33765–53763	1040	2–3	–.78	2.91	1.64–01	3.29–02	4.39+07	6.27+06
5001.870	31307–51294	965	4–3	.42	4.12	2.63+00	2.92–01	7.01+08	1.00+08
5002.800	27395–47378	687	3–4	–1.03	2.67	9.37–02	1.34–02	2.50+07	2.77+06
5004.030	33947–53925	1112	2–1	–.61	3.09	2.44–01	4.88–02	6.50+07	2.17+07
5005.720	31323–51294	984	3–3	.33	4.03	2.14+00	3.05–01	5.69+08	8.12+07
5006.130	22846–42816	318	5–5	–.33	3.37	4.68–01	4.25–02	1.24+08	1.13+07
5007.290	31805–51771	966	3–3	–.11	3.59	7.70–01	1.10–01	2.05+08	2.93+07
5007.710	34637–54600		2–3	–.63	3.07	2.33–01	4.66–02	6.20+07	8.86+06
5012.070	6928–26875	16	5–5	–2.41	1.29	3.89–03	3.54–04	1.03+06	9.39+04
5014.950	31805–51740	965	3–2	.32	4.03	2.11+00	3.02–01	5.60+08	1.12+08
5019.740	32134–52050	966	2–2	–1.34	2.36	4.60–02	9.21–03	1.22+07	2.44+06
5020.820	28605–48516	748	2–1	–1.74	1.96	1.82–02	3.64–03	4.81+06	1.60+06
5021.610	34329–54237	1093	3–4	–.43	3.27	3.72–01	5.31–02	9.84+07	1.09+07
5022.240	32134–52040	965	2–1	.06	3.76	1.15+00	2.31–01	3.05+08	1.02+08
5023.230	34547–54449	1095	2–1	–.59	3.11	2.55–01	5.10–02	6.74+07	2.25+07
5023.480	34782–54683	1150	5–4	–.69	3.01	2.06–01	1.87–02	5.45+07	6.05+06
5027.140	33507–53394	1065	3–4	.11	3.81	1.29+00	1.84–01	3.40+08	3.78+07
5027.210	29357–49243	883	2–3	–.85	2.86	1.43–01	2.86–02	3.77+07	5.38+06
5027.780	33947–53831	1110	2–3	–.33	3.37	4.69–01	9.37–02	1.24+08	1.77+07
5028.130	28820–48703	791	5–4	–.49	3.21	3.20–01	2.91–02	8.45+07	9.39+06
5029.620	27543–47420	718	1–2	–1.52	2.18	3.04–02	1.01–02	8.01+06	1.60+06
5039.260	27167–47006	687	4–5	–.89	2.81	1.28–01	1.42–02	3.35+07	3.05+06
5040.900	34329–54161	1092	3–3	.49	4.20	3.12+00	4.46–01	8.20+08	1.17+08
5041.070	7728–27560	16	3–2	–2.73	.97	1.86–03	2.66–04	4.89+05	9.77+04
5041.760	11976–31805	36	4–3	–2.03	1.67	9.33–03	1.04–03	2.45+06	3.50+05
5044.220	22997–42816	318	4–5	–1.61	2.09	2.45–02	2.73–03	6.43+06	5.85+05
5048.460	31937–51740	984	1–2	–.34	3.37	4.62–01	1.54–01	1.21+08	2.42+07
5049.820	18378–38175	114	2–3	–1.00	2.70	1.00–01	2.00–02	2.62+07	3.74+06
5051.640	7377–27167	16	4–4	–2.71	.99	1.95–03	2.17–04	5.10+05	5.66+04
5054.650	29357–49135	884	2–3	–1.52	2.18	3.02–02	6.05–03	7.90+06	1.13+06
5060.080	0–19757	1	4–3	–5.34	–1.64	4.57–06	5.08–07	1.19+03	1.70+02
5065.020	34329–54067	1094	3–4	.52	4.22	3.30+00	4.71–01	8.57+08	9.52+07
5065.210	29372–49109	883	3–4	–.74	2.96	1.82–01	2.60–02	4.73+07	5.25+06
5067.160	34040–53769	1092	4–4	–.18	3.52	6.55–01	7.28–02	1.70+08	1.89+07
5068.770	23711–43435	383	4–3	–.59	3.11	2.57–01	2.86–02	6.67+07	9.53+06
5072.080	34547–54258	1089	2–2	–.02	3.69	9.59–01	1.92–01	2.49+08	4.97+07
5072.690	34040–53748	1095	4–3	–.29	3.42	5.19–01	5.76–02	1.34+08	1.92+07
5074.760	34040–53739	1094	4–5	.54	4.25	3.50+00	3.89–01	9.07+08	8.24+07
5076.290	34692–54386	1089	1–1	–.03	3.68	9.36–01	3.12–01	2.42+08	8.08+07

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
5078.980	34692–54376	1092	1–2	.41	4.12	2.57+00	8.58–01	6.66+08	1.33+08
5079.230	17727–37410	66	2–1	–1.45	2.26	3.55–02	7.10–03	9.17+06	3.06+06
5079.740	7986–27666	16	2–1	–2.91	.80	1.23–03	2.46–04	3.18+05	1.06+05
5083.340	7728–27395	16	3–3	–2.74	.97	1.82–03	2.60–04	4.70+05	6.71+04
5090.790	34329–53967	1090	3–2	.22	3.93	1.66+00	2.37–01	4.28+08	8.55+07
5097.000	34547–54161	1092	2–3	.37	4.08	2.37+00	4.74–01	6.09+08	8.69+07
5098.700	17550–37158	66	3–2	–1.40	2.31	3.98–02	5.69–03	1.02+07	2.04+06
5099.090	32134–51740	965	2–2	–.57	3.14	2.72–01	5.44–02	6.98+07	1.40+07
5107.450	7986–27560	16	2–2	–2.78	.93	1.66–03	3.32–04	4.24+05	8.49+04
5107.640	12561–32134	36	3–2	–2.04	1.67	9.12–03	1.30–03	2.33+06	4.66+05
5109.650	34692–54258	1089	1–2	–.06	3.65	8.75–01	2.92–01	2.24+08	4.47+07
5110.410	0–19562	1	4–4	–3.34	.37	4.57–04	5.08–05	1.17+05	1.30+04
5121.640	34547–54067	1095	2–2	.07	3.78	1.17+00	2.34–01	2.97+08	5.95+07
5123.720	8155–27666	16	1–1	–2.79	.92	1.62–03	5.41–04	4.12+05	1.37+05
5125.130	34040–53546	1090	4–3	.56	4.27	3.64+00	4.04–01	9.23+08	1.32+08
5126.220	34329–53831	1089	3–3	–.10	3.61	7.96–01	1.14–01	2.02+08	2.89+07
5127.360	7377–26875	16	4–5	–2.91	.80	1.23–03	1.37–04	3.12+05	2.84+04
5129.660	31805–51294	965	3–3	–.96	2.75	1.10–01	1.57–02	2.78+07	3.97+06
5131.480	17927–37410	66	1–1	–1.92	1.79	1.20–02	4.01–03	3.05+06	1.02+06
5133.690	33695–53169	1092	5–6	.89	4.61	7.85+00	7.13–01	1.99+09	1.53+08
5137.390	33695–53155	1090	5–4	.48	4.19	3.05+00	2.77–01	7.70+08	8.55+07
5139.260	24181–43634	383	3–2	–.19	3.52	6.46–01	9.22–02	1.63+08	3.26+07
5139.470	23711–43163	383	4–4	–.05	3.66	8.91–01	9.90–02	2.25+08	2.50+07
5141.750	19552–38996	114	1–1	–1.57	2.14	2.69–02	8.97–03	6.79+06	2.26+06
5142.540	34329–53769	1092	3–4	.43	4.14	2.67+00	3.81–01	6.73+08	7.48+07
5142.930	7728–27167	16	3–4	–2.72	.99	1.91–03	2.72–04	4.81+05	5.34+04
5145.100	17727–37158	66	2–2	–2.40	1.31	3.98–03	7.96–04	1.00+06	2.01+05
5148.060	34547–53967	1090	2–2	.15	3.86	1.41+00	2.83–01	3.56+08	7.12+07
5148.230	34329–53748	1095	3–3	.38	4.10	2.43+00	3.47–01	6.11+08	8.72+07
5150.840	7986–27395	16	2–3	–2.70	1.01	2.00–03	3.99–04	5.02+05	7.17+04
5151.920	8155–27560	16	1–2	–2.83	.88	1.48–03	4.93–04	3.72+05	7.43+04
5159.070	34547–53925	1091	2–1	.07	3.78	1.17+00	2.34–01	2.93+08	9.76+07
5162.290	33695–53061	1089	5–5	.76	4.47	5.72+00	5.20–01	1.43+09	1.30+08
5164.560	35768–55125	1166	4–3	.17	3.88	1.47+00	1.64–01	3.68+08	5.26+07
5165.420	34040–53394	1089	4–4	.33	4.04	2.14+00	2.38–01	5.35+08	5.94+07
5166.290	0–19351	1	4–5	–3.68	.03	2.09–04	2.32–05	5.22+04	4.75+03
5167.490	11976–31323	37	4–3	–.88	2.83	1.32–01	1.46–02	3.29+07	4.70+06
5168.900	416–19757	1	3–3	–3.49	.22	3.24–04	4.62–05	8.08+04	1.15+04
5171.600	11976–31307	36	4–4	–1.28	2.43	5.25–02	5.83–03	1.31+07	1.45+06
5177.230	29799–49109	930	4–4	–1.16	2.55	6.91–02	7.68–03	1.72+07	1.91+06
5180.060	36079–55379	1166	3–2	.06	3.77	1.14+00	1.63–01	2.84+08	5.69+07
5184.290	34547–53831	1089	2–3	–.06	3.66	8.73–01	1.75–01	2.17+08	3.09+07
5187.920	33413–52683	1032	3–2	–.33	3.39	4.71–01	6.72–02	1.17+08	2.33+07
5191.460	24507–43764	383	2–1	.04	3.76	1.10+00	2.19–01	2.71+08	9.05+07
5192.350	24181–43435	383	3–3	.18	3.90	1.51+00	2.16–01	3.74+08	5.35+07
5194.940	12561–31805	36	3–3	–1.63	2.09	2.34–02	3.35–03	5.79+06	8.28+05
5195.470	34040–53282	1092	4–5	.62	4.34	4.19+00	4.66–01	1.04+09	9.42+07
5196.100	34329–53569	1091	3–2	.35	4.07	2.25+00	3.21–01	5.56+08	1.11+08
5197.940	34692–53925	1091	1–1	–.40	3.31	3.96–01	1.32–01	9.77+07	3.26+07
5198.710	17927–37158	66	1–2	–1.50	2.22	3.16–02	1.05–02	7.80+06	1.56+06
5202.340	17550–36767	66	3–3	–1.19	2.53	6.46–02	9.22–03	1.59+07	2.27+06
5204.590	704–19913	1	2–2	–3.77	–.05	1.70–04	3.40–05	4.18+04	8.36+03
5207.940	29320–48516	880	1–1	–1.20	2.52	6.31–02	2.10–02	1.55+07	5.17+06
5208.600	26140–45334	553	3–2	–.18	3.54	6.61–01	9.44–02	1.62+08	3.25+07
5215.180	26340–45509	553	2–1	–.17	3.55	6.76–01	1.35–01	1.66+08	5.53+07
5216.280	12969–32134	36	2–2	–1.65	2.07	2.24–02	4.48–03	5.49+06	1.10+06
5217.400	25900–45061	553	4–3	–.37	3.35	4.27–01	4.74–02	1.05+08	1.49+07
5217.930	29357–48516	880	2–1	–.90	2.82	1.26–01	2.52–02	3.08+07	1.03+07
5223.190	29320–48460	880	1–0	–1.21	2.51	6.14–02	2.05–02	1.50+07	1.50+07
5225.530	888–20020	1	1–1	–4.26	–.54	5.50–05	1.83–05	1.34+04	4.47+03
5226.870	24507–43634	383	2–2	–.01	3.71	9.77–01	1.95–01	2.39+08	4.77+07
5227.190	12561–31686	37	3–2	–.84	2.88	1.45–01	2.06–02	3.53+07	7.06+06
5228.390	34040–53161	1091	4–3	.11	3.83	1.30+00	1.45–01	3.17+08	4.53+07
5229.860	26479–45595	553	1–0	–.19	3.53	6.46–01	2.15–01	1.57+08	1.57+08
5232.950	23711–42816	383	4–5	.39	4.11	2.45+00	2.73–01	5.98+08	5.44+07
5235.390	20875–39970	210	3–3	–1.48	2.24	3.31–02	4.73–03	8.06+06	1.15+06
5236.200	33765–52858	1034	2–1	–.40	3.32	4.02–01	8.04–02	9.77+07	3.26+07
5242.500	29313–48383	834	6–5	–.19	3.53	6.40–01	4.92–02	1.55+08	1.41+07
5243.790	34329–53394	1089	3–4	–.15	3.57	7.08–01	1.01–01	1.72+08	1.91+07
5247.060	704–19757	1	2–3	–4.50	–.78	3.16–05	6.32–06	7.66+03	1.09+03

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
5249.100	36079−55125	1166	3−3	−.21	3.51	6.14−01	8.77−02	1.49+08	2.12+07
5250.210	978−20020	1	0−1	−4.46	−.74	3.47−05	3.47−05	8.39+03	2.80+03
5250.650	17727−36767	66	2−3	−1.52	2.20	3.02−02	6.04−03	7.31+06	1.04+06
5253.500	26479−45509	553	1−1	−.80	2.92	1.58−01	5.28−02	3.83+07	1.28+07
5254.960	888−19913	1	1−2	−4.23	−.51	5.89−05	1.96−05	1.42+04	2.84+03
5263.310	26340−45334	553	2−2	−.19	3.53	6.46−01	1.29−01	1.55+08	3.11+07
5263.870	28820−47812	788	5−4	−1.04	2.68	9.14−02	8.31−03	2.20+07	2.44+06
5266.560	24181−43163	383	3−4	.09	3.81	1.23+00	1.76−01	2.96+08	3.29+07
5269.540	6928−25900	15	5−4	−1.35	2.37	4.47−02	4.06−03	1.07+07	1.19+06
5270.360	12969−31937	37	2−1	−.99	2.73	1.02−01	2.05−02	2.46+07	8.19+06
5273.180	26550−45509	553	0−1	−.27	3.45	5.37−01	5.37−01	1.29+08	4.29+07
5273.380	20038−38996	114	0−1	−1.36	2.36	4.37−02	4.37−02	1.05+07	3.49+06
5280.360	29372−48305	880	3−2	−.84	2.89	1.46−01	2.08−02	3.49+07	6.97+06
5281.800	24507−43435	383	2−3	−.25	3.47	5.62−01	1.12−01	1.34+08	1.92+07
5283.630	26140−45061	553	3−3	.20	3.92	1.58+00	2.26−01	3.79+08	5.41+07
5284.420	29313−48231	842	6−5	−1.28	2.44	5.27−02	4.05−03	1.26+07	1.14+06
5285.130	35768−54683	1166	4−4	−.33	3.40	4.72−01	5.24−02	1.13+08	1.25+07
5288.540	29799−48703	929	4−4	−.75	2.97	1.76−01	1.96−02	4.20+07	4.67+06
5293.960	33413−52297	1031	3−2	−.68	3.04	2.08−01	2.97−02	4.95+07	9.90+06
5298.780	29372−48239	875	3−2	−1.11	2.62	7.79−02	1.11−02	1.85+07	3.70+06
5302.310	26479−45334	553	1−2	−.04	3.68	9.12−01	3.04−01	2.16+08	4.33+07
5307.360	12969−31805	36	2−3	−2.46	1.26	3.47−03	6.93−04	8.21+05	1.17+05
5315.080	35257−54067	1147	4−4	−.52	3.20	3.01−01	3.34−02	7.10+07	7.88+06
5320.050	29372−48163	877	3−2	−1.45	2.28	3.55−02	5.07−03	8.36+06	1.67+06
5321.110	35768−54555	1165	4−4	−.11	3.62	7.84−01	8.71−02	1.85+08	2.05+07
5322.050	18378−37163	112	2−3	−1.97	1.76	1.07−02	2.14−03	2.52+06	3.60+05
5324.190	25900−44677	553	4−4	.47	4.20	2.95+00	3.28−01	6.94+08	7.72+07
5328.040	7377−26140	15	4−3	−1.46	2.27	3.47−02	3.85−03	8.15+06	1.16+06
5328.530	12561−31323	37	3−3	−1.50	2.23	3.16−02	4.52−03	7.43+06	1.06+06
5329.990	32874−51630	1028	4−5	−.24	3.49	5.73−01	6.37−02	1.35+08	1.22+07
5332.680	33765−52512	1031	2−1	−.29	3.44	5.15−01	1.03−01	1.21+08	4.02+07
5332.900	12561−31307	36	3−4	−2.36	1.37	4.37−03	6.24−04	1.02+06	1.14+05
5339.940	26340−45061	553	2−3	−.11	3.62	7.76−01	1.55−01	1.82+08	2.59+07
5341.030	12969−31686	37	2−2	−1.59	2.14	2.57−02	5.14−03	6.01+06	1.20+06
5349.740	35379−54067	1163	5−4	−.45	3.28	3.53−01	3.21−02	8.23+07	9.14+06
5353.390	33096−51771	1062	4−3	−.07	3.66	8.44−01	9.38−02	1.97+08	2.81+07
5364.870	35856−54491	1146	2−3	.91	4.64	8.12+00	1.62+00	1.88+09	2.69+08
5365.400	28820−47453	786	5−4	−.36	3.37	4.40−01	4.00−02	1.02+08	1.13+07
5367.470	35612−54237	1146	3−4	.99	4.72	9.78+00	1.40+00	2.26+09	2.52+08
5369.960	35257−53874	1146	4−5	1.07	4.80	1.19+01	1.32+00	2.74+09	2.49+08
5371.490	7728−26340	15	3−2	−1.60	2.13	2.51−02	3.59−03	5.81+06	1.16+06
5373.700	36079−54683	1166	3−4	.24	3.97	1.75+00	2.51−01	4.05+08	4.50+07
5376.850	34637−53230	1132	2−1	.27	4.00	1.86+00	3.71−01	4.28+08	1.43+08
5379.580	29799−48383	928	4−5	−.78	2.95	1.64−01	1.83−02	3.79+07	3.44+06
5383.370	34782−53353	1146	5−6	1.17	4.90	1.47+01	1.34+00	3.38+09	2.60+08
5386.340	33507−52067	1064	3−2	−.87	2.87	1.36−01	1.95−02	3.13+07	6.26+06
5387.510	33413−51969	1031	3−3	−.96	2.77	1.09−01	1.56−02	2.51+07	3.59+06
5389.480	35612−54161	1145	3−3	.38	4.12	2.43+00	3.46−01	5.57+08	7.96+07
5391.470	33507−52050	1062	3−2	−.08	3.65	8.38−01	1.20−01	1.92+08	3.84+07
5393.170	26140−44677	553	3−4	−.10	3.63	7.94−01	1.13−01	1.82+08	2.02+07
5397.130	7377−25900	15	4−4	−1.88	1.85	1.32−02	1.46−03	3.02+06	3.35+05
5398.280	35856−54376	1145	2−2	.27	4.00	1.87+00	3.73−01	4.27+08	8.54+07
5400.510	35257−53769	1145	4−4	.58	4.31	3.77+00	4.19−01	8.62+08	9.58+07
5401.270	34844−53353	1146	6−6	−.66	3.07	2.17−01	1.67−02	4.97+07	3.82+06
5403.820	32874−51374	1029	4−5	.03	3.77	1.08+00	1.20−01	2.47+08	2.25+07
5404.140	34782−53282	1165	5−5	1.21	4.95	1.63+01	1.48+00	3.72+09	3.39+08
5405.360	35379−53874	1162	5−5	.15	3.89	1.43+00	1.30−01	3.25+08	2.96+07
5405.780	7986−26479	15	2−1	−1.75	1.98	1.78−02	3.56−03	4.06+06	1.35+06
5409.120	35257−53739	1147	4−5	−.32	3.42	4.83−01	5.37−02	1.10+08	1.00+07
5410.910	36079−54555	1165	3−4	1.04	4.78	1.11+01	1.58+00	2.52+09	2.80+08
5415.200	35379−53841	1165	5−6	1.20	4.94	1.59+01	1.45+00	3.62+09	2.78+08
5417.040	35612−54067	1148	3−2	−.55	3.18	2.80−01	4.01−02	6.38+07	1.28+07
5424.070	34844−53275	1146	6−7	1.18	4.92	1.52+01	1.17+00	3.45+09	2.30+08
5429.700	7728−26140	15	3−3	−1.78	1.95	1.66−02	2.37−03	3.75+06	5.36+05
5434.530	8155−26550	15	1−0	−1.97	1.77	1.07−02	3.57−03	2.42+06	2.42+06
5436.590	18378−36767	113	2−3	−2.72	1.02	1.91−03	3.81−04	4.30+05	6.14+04
5441.320	34782−53155	1144	5−4	−.77	2.97	1.71−01	1.56−02	3.86+07	4.29+06
5445.040	35379−53739	1163	5−5	.67	4.41	4.72+00	4.29−01	1.06+09	9.66+07
5446.920	7986−26340	15	2−2	−1.90	1.84	1.26−02	2.52−03	2.83+06	5.66+05
5455.430	34844−53169	1145	6−6	.48	4.22	3.05+00	2.35−01	6.84+08	5.26+07

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
5455.610	8155−26479	15	1−1	−2.03	1.71	9.33−03	3.11−03	2.09+06	6.97+05
5461.550	35856−54161	1145	2−3	−.64	3.10	2.32−01	4.63−02	5.18+07	7.40+06
5462.970	36079−54379	1163	3−3	.48	4.22	3.03+00	4.32−01	6.76+08	9.66+07
5463.280	35768−54067	1163	4−4	.63	4.37	4.25+00	4.72−01	9.49+08	1.05+08
5464.290	33413−51708	1030	3−2	−.68	3.06	2.10−01	3.00−02	4.70+07	9.40+06
5466.400	35257−53546	1144	4−3	−.02	3.72	9.56−01	1.06−01	2.13+08	3.05+07
5466.990	29469−47756	817	2−3	−1.25	2.49	5.62−02	1.12−02	1.25+07	1.79+06
5472.730	33947−52214	1108	2−1	−.44	3.30	3.66−01	7.31−02	8.14+07	2.71+07
5473.910	33507−51771	1062	3−3	−.03	3.70	9.26−01	1.32−01	2.06+08	2.94+07
5476.300	33413−51668	1029	3−4	−.21	3.53	6.17−01	8.82−02	1.37+08	1.53+07
5476.570	33096−51351	1062	4−4	.29	4.03	1.96+00	2.18−01	4.36+08	4.85+07
5478.460	33802−52050	1062	2−2	−.71	3.03	1.96−01	3.93−02	4.36+07	8.73+06
5480.870	34017−52257	1062	1−0	−.32	3.41	4.74−01	1.58−01	1.05+08	1.05+08
5481.260	33096−51335	1058	4−4	−.51	3.23	3.10−01	3.45−02	6.89+07	7.66+06
5481.450	33802−52040	1061	2−1	−.50	3.24	3.18−01	6.36−02	7.06+07	2.35+07
5483.120	33507−51740	1061	3−2	−.54	3.20	2.92−01	4.17−02	6.47+07	1.29+07
5487.140	35612−53831	1143	3−3	−.63	3.11	2.35−01	3.36−02	5.20+07	7.43+06
5487.750	33413−51630	1025	3−2	−.03	3.71	9.30−01	1.33−01	2.06+08	4.12+07
5493.510	33096−51294	1061	4−3	−.79	2.95	1.62−01	1.80−02	3.58+07	5.12+06
5494.460	32874−51069	1024	4−5	−.94	2.80	1.14−01	1.27−02	2.52+07	2.29+06
5497.520	8155−26340	15	1−2	−2.49	1.25	3.24−03	1.08−03	7.14+05	1.43+05
5501.470	7728−25900	15	3−4	−2.66	1.08	2.19−03	3.13−04	4.82+05	5.36+04
5505.890	35612−53769	1145	3−4	−.34	3.40	4.53−01	6.48−02	9.97+07	1.11+07
5506.780	7986−26140	15	2−3	−2.44	1.30	3.63−03	7.26−04	7.99+05	1.14+05
5512.280	35257−53394	1143	4−4	−.52	3.22	3.02−01	3.36−02	6.63+07	7.37+06
5522.460	33947−52050	1180	2−2	−.59	3.16	2.59−01	5.18−02	5.66+07	1.13+07
5525.550	34122−52214	1062	0−1	−.32	3.43	4.82−01	4.82−01	1.05+08	3.51+07
5529.130	29372−47453	872	3−4	−1.63	2.12	2.36−02	3.37−03	5.15+06	5.73+05
5532.740	28820−46889	783	5−4	−1.35	2.40	4.51−02	4.10−03	9.82+06	1.09+06
5535.420	26225−44285	626	3−2	−1.08	2.66	8.32−02	1.19−02	1.81+07	3.62+06
5538.540	34017−52067	1064	1−2	−.63	3.12	2.37−01	7.89−02	5.15+07	1.03+07
5539.270	29372−47420	871	3−2	−1.50	2.25	3.18−02	4.54−03	6.91+06	1.38+06
5543.180	29799−47834	926	4−3	−.76	2.99	1.74−01	1.94−02	3.78+07	5.41+06
5543.930	34017−52050	1062	1−2	−.26	3.49	5.53−01	1.84−01	1.20+08	2.40+07
5546.490	35257−53282	1145	4−5	−.23	3.52	5.92−01	6.58−02	1.28+08	1.17+07
5547.000	34017−52040	1061	1−1	−.86	2.89	1.39−01	4.63−02	3.01+07	1.00+07
5553.590	35768−53769	1161	4−4	−.33	3.41	4.64−01	5.15−02	1.00+08	1.11+07
5554.900	36686−54683	1183	4−4	.37	4.12	2.37+00	2.63−01	5.11+08	5.68+07
5557.960	36079−54067	1163	3−4	−.17	3.57	6.73−01	9.61−02	1.45+08	1.61+07
5560.230	35768−53748	1164	4−3	−.20	3.55	6.38−01	7.09−02	1.38+08	1.97+07
5562.710	35768−53739	1163	4−5	−.05	3.70	9.00−01	1.00−01	1.94+08	1.76+07
5563.600	33802−51771	1062	2−3	−.08	3.66	8.25−01	1.65−01	1.78+08	2.54+07
5565.710	37163−55125	1183	3−3	.55	4.29	3.53+00	5.05−01	7.61+08	1.09+08
5567.400	21039−38996	209	2−1	−1.98	1.77	1.05−02	2.09−03	2.25+06	7.51+05
5569.620	27560−45509	686	2−1	.07	3.82	1.17+00	2.35−01	2.53+08	8.42+07
5572.850	27395−45334	686	3−2	.28	4.03	1.91+00	2.72−01	4.09+08	8.18+07
5573.100	33802−51740	1061	2−2	−.16	3.59	6.99−01	1.40−01	1.50+08	3.00+07
5576.100	27666−45595	686	1−0	−.31	3.44	4.90−01	1.63−01	1.05+08	1.05+08
5584.770	28820−46721	782	5−4	−1.19	2.56	6.48−02	5.90−03	1.39+07	1.54+06
5586.760	27167−45061	686	4−3	.34	4.09	2.19+00	2.43−01	4.68+08	6.68+07
5587.580	33413−51305	1026	3−4	−.36	3.39	4.37−01	6.24−02	9.33+07	1.04+07
5594.670	36686−54555	1182	4−4	.06	3.81	1.16+00	1.29−01	2.47+08	2.74+07
5598.300	37521−55379	1183	2−2	.58	4.33	3.79+00	7.58−01	8.06+08	1.61+08
5600.240	34363−52214	1108	1−1	−.40	3.35	4.01−01	1.34−01	8.52+07	2.84+07
5602.770	33507−51351	1062	3−4	−.07	3.68	8.57−01	1.22−01	1.82+08	2.02+07
5602.960	27666−45509	686	1−1	−.25	3.50	5.62−01	1.87−01	1.19+08	3.98+07
5615.300	20875−38678	209	3−2	−1.51	2.24	3.09−02	4.41−03	6.54+06	1.31+06
5615.650	26875−44677	686	5−4	.51	4.26	3.24+00	2.94−01	6.84+08	7.60+07
5618.630	33947−51740	1107	2−2	−.21	3.54	6.23−01	1.25−01	1.32+08	2.63+07
5619.600	35379−53169	1161	5−6	−.49	3.26	3.27−01	2.97−02	6.91+07	5.31+06
5620.530	33507−51294	1061	3−3	−.64	3.11	2.29−01	3.27−02	4.83+07	6.90+06
5624.060	35379−53155	1160	5−4	−.10	3.65	8.01−01	7.28−02	1.69+08	1.88+07
5624.550	27560−45334	686	2−2	−.18	3.57	6.61−01	1.32−01	1.39+08	2.79+07
5633.970	40257−58002	1314	5−6	.86	4.61	7.31+00	6.64−01	1.54+09	1.18+08
5635.840	34329−52067	1088	3−2	−.42	3.34	3.84−01	5.48−02	8.06+07	1.61+07
5636.690	29357−47093	868	2−3	−1.19	2.56	6.41−02	1.28−02	1.35+07	1.92+06
5638.270	34040−51771	1087	4−3	.02	3.77	1.04+00	1.15−01	2.18+08	3.11+07
5641.450	34329−52050	1087	3−2	−.13	3.62	7.47−01	1.07−01	1.56+08	3.13+07
5649.660	29313−47008	838	6−5	−1.37	2.38	4.22−02	3.25−03	8.82+06	8.02+05
5650.010	41131−58825	1314	1−2	.59	4.34	3.89+00	1.30+00	8.13+08	1.63+08

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
5650.720	41018–58710	1314	2–3	.39	4.14	2.45+00	4.90−01	5.12+08	7.32+07
5652.320	34363–52050	1108	1–2	−.46	3.30	3.49−01	1.16−01	7.29+07	1.46+07
5653.890	35379–53061	1159	5–5	−.36	3.39	4.34−01	3.94−02	9.05+07	8.23+06
5655.180	40842–58520	1314	3–4	.74	4.49	5.52+00	7.88−01	1.15+09	1.28+08
5655.510	40594–58272	1314	4–5	.77	4.52	5.87+00	6.52−01	1.22+09	1.11+08
5658.540	27666–45334	686	1–2	−.96	2.79	1.10−01	3.65−02	2.28+07	4.57+06
5658.830	27395–45061	686	3–3	−.15	3.60	7.08−01	1.01−01	1.47+08	2.11+07
5661.360	34556–52214	1108	0–1	−.57	3.19	2.71−01	2.71−01	5.64+07	1.88+07
5662.520	33695–51351	1087	5–4	.39	4.15	2.47+00	2.25−01	5.14+08	5.71+07
5662.940	29799–47453	924	4–4	−1.09	2.67	8.19−02	9.10−03	1.70+07	1.89+06
5679.020	37521–55125	1183	2–3	.39	4.14	2.44+00	4.89−01	5.06+08	7.22+07
5686.530	36686–54267	1182	4–5	.43	4.19	2.71+00	3.01−01	5.59+08	5.08+07
5691.510	34692–52257	1087	1–0	−.31	3.44	4.85−01	1.62−01	9.99+07	9.99+07
5701.550	20641–38175	209	4–3	−1.40	2.36	3.98−02	4.42−03	8.17+06	1.17+06
5705.480	34692–52214	1087	1–1	−.31	3.45	4.93−01	1.64−01	1.01+08	3.37+07
5705.990	37163–54683	1183	3–4	.50	4.26	3.19+00	4.56−01	6.54+08	7.26+07
5707.060	29372–46889	868	3–4	−1.12	2.64	7.66−02	1.09−02	1.57+07	1.74+06
5708.110	35768–53282	1161	4–5	−.24	3.52	5.79−01	6.43−02	1.18+08	1.08+07
5709.390	27167–44677	686	4–4	−.36	3.40	4.37−01	4.85−02	8.93+07	9.92+06
5711.870	34547–52050	1087	2–2	−.29	3.47	5.17−01	1.03−01	1.06+08	2.11+07
5712.140	27560–45061	686	2–3	−1.06	2.70	8.71−02	1.74−02	1.78+07	2.54+06
5715.110	33802–51294	1061	2–3	−.28	3.48	5.24−01	1.05−01	1.07+08	1.53+07
5717.840	34556–52040	1107	0–1	−.01	3.75	9.83−01	9.83−01	2.01+08	6.68+07
5731.770	34329–51771	1087	3–3	−.09	3.66	8.06−01	1.15−01	1.64+08	2.34+07
5741.860	34329–51740	1086	3–2	−.45	3.31	3.59−01	5.12−02	7.26+07	1.45+07
5747.960	37163–54555	1182	3–4	−.14	3.62	7.31−01	1.04−01	1.48+08	1.64+07
5752.040	36686–54067	1180	4–4	.15	3.91	1.41+00	1.56−01	2.83+08	3.15+07
5753.140	34363–51740	1107	1–2	.23	3.99	1.72+00	5.72−01	3.46+08	6.92+07
5754.410	29372–46745	866	3–3	−1.36	2.40	4.39−02	6.27−03	8.84+06	1.26+06
5760.350	29372–46727	867	3–2	−1.26	2.50	5.52−02	7.89−03	1.11+07	2.22+06
5762.430	29372–46721	866	3–4	−1.21	2.55	6.19−02	8.85−03	1.24+07	1.38+06
5762.990	33947–51294	1107	2–3	.40	4.16	2.51+00	5.02−01	5.04+08	7.20+07
5775.090	34040–51351	1087	4–4	−.16	3.60	6.96−01	7.74−02	1.39+08	1.55+07
5780.620	26140–43435	552	3–3	−1.60	2.16	2.51−02	3.59−03	5.01+06	7.16+05
5780.830	26340–43634	552	2–2	−1.80	1.96	1.58−02	3.17−03	3.16+06	6.33+05
5784.690	27395–44677	686	3–4	−1.62	2.14	2.40−02	3.43−03	4.78+06	5.31+05
5791.040	25900–43163	552	4–4	−1.37	2.39	4.27−02	4.74−03	8.48+06	9.43+05
5793.930	34040–51294	1086	4–3	−.65	3.11	2.24−01	2.49−02	4.44+07	6.35+06
5798.190	31686–48928	982	2–2	−.84	2.93	1.46−01	2.91−02	2.89+07	5.78+06
5804.070	31307–48532	959	4–3	−1.11	2.65	7.77−02	8.63−03	1.54+07	2.20+06
5806.730	37163–54379	1180	3–3	.15	3.91	1.42+00	2.02−01	2.80+08	4.00+07
5809.240	31323–48532	982	3–3	−.80	2.96	1.59−01	2.27−02	3.14+07	4.48+06
5811.940	33413–50614	1022	3–4	−.84	2.93	1.46−01	2.09−02	2.88+07	3.20+06
5814.820	34547–51740	1086	2–2	−.64	3.13	2.32−01	4.63−02	4.57+07	9.14+06
5816.360	36686–53874	1179	4–5	.26	4.03	1.84+00	2.04−01	3.62+08	3.29+07
5852.190	36686–53769	1178	4–4	−.13	3.63	7.35−01	8.17−02	1.43+08	1.59+07
5855.130	37163–54237	1179	3–4	−.16	3.61	6.92−01	9.89−02	1.35+08	1.50+07
5856.080	34637–51708	1128	2–2	−.39	3.38	4.10−01	8.20−02	7.98+07	1.60+07
5859.200	34692–51755	1084	1–1	−.59	3.17	2.54−01	8.48−02	4.94+07	1.65+07
5859.610	36686–53748	1181	4–3	.34	4.11	2.21+00	2.46−01	4.30+08	6.14+07
5862.360	36686–53739	1180	4–5	.48	4.25	3.05+00	3.39−01	5.92+08	5.38+07
5871.040	19913–36941	150	2–2	−2.58	1.19	2.63−03	5.26−04	5.09+05	1.02+05
5871.290	33507–50534	1055	3–3	−.77	3.00	1.70−01	2.43−02	3.29+07	4.70+06
5873.220	34329–51351	1087	3–4	−.54	3.23	2.90−01	4.15−02	5.61+07	6.24+06
5883.840	31937–48928	982	1–2	−.41	3.36	3.92−01	1.31−01	7.55+07	1.51+07
5902.530	37046–53983	1234	4–5	−.42	3.35	3.82−01	4.24−02	7.31+07	6.64+06
5905.670	37521–54449	1181	2–1	.26	4.03	1.80+00	3.61−01	3.45+08	1.15+08
5908.250	20020–36941	150	1–2	−2.47	1.30	3.39−03	1.13−03	6.47+05	1.29+05
5914.100	37163–54067	1180	3–4	.46	4.23	2.87+00	4.10−01	5.47+08	6.08+07
5914.190	37163–54067	1181	3–2	.55	4.32	3.53+00	5.04−01	6.73+08	1.35+08
5916.250	19788–36686	170	4–4	−2.10	1.67	7.94−03	8.83−04	1.51+06	1.68+05
5920.520	26106–42992	581	6–5	−1.79	1.98	1.62−02	1.25−03	3.09+06	2.81+05
5927.800	37521–54386	1175	2–1	.00	3.77	1.00+00	2.01−01	1.90+08	6.35+07
5929.700	36686–53546	1176	4–3	−.25	3.52	5.63−01	6.26−02	1.07+08	1.53+07
5930.170	37521–54379	1180	2–3	.69	4.46	4.91+00	9.82−01	9.31+08	1.33+08
5934.660	31686–48532	982	2–3	−.37	3.40	4.27−01	8.54−02	8.09+07	1.16+07
5940.970	33695–50523	1083	5–6	−.85	2.92	1.41−01	1.28−02	2.67+07	2.05+06
5949.350	7377–24181	14	4–3	−4.27	−.50	5.37−05	5.97−06	1.01+04	1.45+03
5952.750	32134–48928	959	2–2	−.56	3.22	2.78−01	5.55−02	5.22+07	1.04+07
5956.700	6928–23711	14	5–4	−4.06	−.28	8.71−05	7.92−06	1.64+04	1.82+03

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
5969.550	34547–51294	1086	2–3	–.81	2.97	1.55–01	3.10–02	2.90+07	4.14+06
5975.360	38996–55727	1260	1–0	.36	4.13	2.27+00	7.58–01	4.25+08	4.25+08
5976.800	31805–48532	959	3–3	–.53	3.25	2.95–01	4.22–02	5.52+07	7.88+06
5983.700	36686–53394	1175	4–4	.18	3.96	1.51+00	1.68–01	2.82+08	3.13+07
5984.800	38175–54880	1260	3–2	.55	4.33	3.54+00	5.06–01	6.59+08	1.32+08
5987.060	38678–55376	1260	2–1	.40	4.18	2.50+00	5.00–01	4.65+08	1.55+08
5997.800	37163–53831	1175	3–3	–.19	3.59	6.47–01	9.24–02	1.20+08	1.71+07
6003.030	31307–47961	959	4–4	–.41	3.37	3.93–01	4.37–02	7.28+07	8.08+06
6005.530	20875–37521	207	3–2	–2.71	1.07	1.95–03	2.79–04	3.61+05	7.21+04
6007.960	37521–54161	1178	2–3	.14	3.92	1.40+00	2.79–01	2.58+08	3.68+07
6008.580	31323–47961	982	3–4	–.36	3.42	4.41–01	6.30–02	8.15+07	9.05+06
6020.170	37163–53769	1178	3–4	.48	4.26	2.99+00	4.28–01	5.51+08	6.12+07
6024.070	36686–53282	1178	4–5	.72	4.50	5.28+00	5.86–01	9.70+08	8.82+07
6027.060	32874–49461	1018	4–5	–.29	3.49	5.16–01	5.74–02	9.48+07	8.62+06
6055.990	38175–54683	1259	3–4	.37	4.16	2.37+00	3.38–01	4.30+08	4.78+07
6062.890	17550–34040	63	3–4	–3.20	.58	6.31–04	9.01–05	1.14+05	1.27+04
6065.490	21039–37521	207	2–2	–1.03	2.75	9.33–02	1.87–02	1.69+07	3.38+06
6078.500	38678–55125	1259	2–3	.42	4.20	2.62+00	5.24–01	4.73+08	6.76+07
6079.020	37521–53967	1176	2–2	–.18	3.60	6.62–01	1.32–01	1.19+08	2.39+07
6082.710	17927–34363	64	1–1	–2.92	.86	1.20–03	4.01–04	2.17+05	7.22+04
6085.270	22249–38678	269	3–2	–2.43	1.35	3.72–03	5.31–04	6.69+05	1.34+05
6089.570	40534–56951	1327	3–4	.27	4.05	1.86+00	2.66–01	3.35+08	3.72+07
6093.660	37163–53569	1177	3–2	–.43	3.36	3.73–01	5.34–02	6.71+07	1.34+07
6096.690	32134–48532	959	2–3	–.95	2.84	1.12–01	2.25–02	2.02+07	2.88+06
6102.180	38996–55379	1259	1–2	.47	4.25	2.94+00	9.80–01	5.27+08	1.05+08
6103.190	38996–55376	1260	1–1	.20	3.98	1.58+00	5.26–01	2.83+08	9.42+07
6127.910	33413–49727	1017	3–4	–.60	3.19	2.53–01	3.62–02	4.50+07	5.00+06
6136.620	19788–36079	169	4–3	–.94	2.85	1.15–01	1.28–02	2.03+07	2.91+06
6137.000	17727–34017	62	2–1	–2.38	1.41	4.17–03	8.34–04	7.38+05	2.46+05
6137.700	20875–37163	207	3–3	–.95	2.84	1.12–01	1.60–02	1.99+07	2.84+06
6141.730	29056–45334	816	3–2	–.96	2.83	1.10–01	1.57–02	1.94+07	3.88+06
6147.850	32874–49135	1016	4–3	–.75	3.04	1.78–01	1.98–02	3.14+07	4.49+06
6151.620	17550–33802	62	3–2	–2.71	1.08	1.95–03	2.79–04	3.44+05	6.87+04
6157.730	32874–49109	1015	4–4	–.45	3.34	3.55–01	3.94–02	6.24+07	6.93+06
6163.540	17727–33947	64	2–2	–3.03	.76	9.33–04	1.87–04	1.64+05	3.28+04
6165.370	33413–49628	1018	3–4	–.63	3.16	2.34–01	3.35–02	4.11+07	4.57+06
6170.490	38678–54880	1260	2–2	.36	4.15	2.29+00	4.57–01	4.00+08	8.01+07
6173.340	17927–34122	62	1–0	–2.40	1.39	3.98–03	1.33–03	6.97+05	6.97+05
6180.210	21999–38175	269	4–3	–2.08	1.71	8.32–03	9.24–04	1.45+06	2.08+05
6188.040	31805–47961	959	3–4	–.88	2.92	1.33–01	1.90–02	2.32+07	2.58+06
6191.560	19621–35768	169	5–4	–1.09	2.70	8.13–02	7.39–03	1.41+07	1.57+06
6200.320	21039–37163	207	2–3	–1.96	1.83	1.10–02	2.19–03	1.90+06	2.72+05
6212.040	35257–51351	1142	4–4	–.89	2.91	1.30–01	1.44–02	2.24+07	2.49+06
6213.440	17927–34017	62	1–1	–2.15	1.64	7.08–03	2.36–03	1.22+06	4.08+05
6215.150	33765–49851	1018	2–3	–.52	3.27	3.01–01	6.03–02	5.20+07	7.43+06
6219.290	17727–33802	62	2–2	–2.04	1.75	9.12–03	1.82–03	1.57+06	3.15+05
6220.770	31307–47378	958	4–4	–1.46	2.34	3.48–02	3.87–03	6.00+06	6.67+05
6226.760	31323–47378	981	3–4	–1.22	2.58	6.05–02	8.64–03	1.04+07	1.16+06
6229.230	22947–38996	342	1–1	–2.11	1.68	7.76–03	2.59–03	1.33+06	4.45+05
6230.730	20641–36686	207	4–4	–.93	2.86	1.17–01	1.31–02	2.02+07	2.24+06
6232.660	29469–45509	816	2–1	–.72	3.07	1.91–01	3.81–02	3.27+07	1.09+07
6240.270	33413–49433	1015	3–2	–1.14	2.66	7.28–02	1.04–02	1.25+07	2.49+06
6240.660	17927–33947	64	1–2	–2.68	1.12	2.09–03	6.96–04	3.58+05	7.16+04
6245.840	40422–56428	1289	4–5	–.06	3.74	8.81–01	9.79–02	1.51+08	1.37+07
6246.330	29056–45061	816	3–3	–.31	3.49	4.90–01	7.00–02	8.37+07	1.20+07
6252.560	19390–35379	169	6–5	–1.29	2.51	5.13–02	3.95–03	8.75+06	7.95+05
6254.260	18378–34363	111	2–1	–1.98	1.82	1.05–02	2.09–03	1.79+06	5.95+05
6256.370	19788–35768	169	4–4	–2.03	1.77	9.33–03	1.04–03	1.59+06	1.77+05
6265.140	17550–33507	62	3–3	–2.00	1.80	1.00–02	1.43–03	1.70+06	2.43+05
6270.240	23052–38996	342	0–1	–1.91	1.89	1.23–02	1.23–02	2.09+06	6.96+05
6271.290	26875–42816	685	5–5	–2.00	1.80	1.00–02	9.09–04	1.70+06	1.54+05
6280.620	6928–22846	13	5–5	–3.99	–.19	1.02–04	9.30–06	1.73+04	1.57+03
6290.970	38175–54067	1258	3–2	.11	3.91	1.28+00	1.83–01	2.16+08	4.32+07
6297.800	17927–33802	62	1–2	–2.31	1.49	4.90–03	1.63–03	8.24+05	1.65+05
6301.520	29469–45334	816	2–2	–.22	3.58	6.03–01	1.21–01	1.01+08	2.02+07
6302.510	29733–45595	816	1–0	–.61	3.19	2.45–01	8.18–02	4.12+07	4.12+07
6311.510	22838–38678	342	2–2	–2.24	1.56	5.75–03	1.15–03	9.64+05	1.93+05
6315.320	33413–49243	1015	3–3	–.48	3.33	3.35–01	4.78–02	5.60+07	8.00+06
6315.420	33413–49243	1016	3–2	–1.00	2.81	1.01–01	1.44–02	1.69+07	3.38+06
6315.810	32874–48703	1014	4–4	–.75	3.05	1.76–01	1.96–02	2.94+07	3.27+06

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
6318.020	19788–35612	168	4–3	−1.56	2.24	2.75−02	3.06−03	4.60+06	6.57+05
6322.690	20875–36686	207	3–4	−1.93	1.87	1.17−02	1.68−03	1.96+06	2.18+05
6330.860	38175–53967	1254	3–2	−.31	3.49	4.90−01	7.01−02	8.16+07	1.63+07
6335.340	17727–33507	62	2–3	−1.86	1.94	1.38−02	2.76−03	2.29+06	3.28+05
6336.840	29733–45509	816	1–1	−.28	3.52	5.25−01	1.75−01	8.72+07	2.91+07
6338.900	38678–54449	1258	2–1	−.02	3.78	9.47−01	1.89−01	1.57+08	5.24+07
6344.150	19621–35379	169	5–5	−2.32	1.48	4.79−03	4.35−04	7.93+05	7.21+04
6355.040	22947–38678	342	1–2	−1.76	2.04	1.74−02	5.79−03	2.87+06	5.74+05
6358.690	6928–22650	13	5–6	−4.00	−.20	1.00−04	9.09−06	1.65+04	1.27+03
6362.890	33765–49477	1019	2–2	−.81	3.00	1.56−01	3.12−02	2.57+07	5.15+06
6364.380	38678–54386	1253	2–1	−.32	3.49	4.80−01	9.61−02	7.91+07	2.64+07
6364.720	36976–52683	1229	3–2	−.72	3.09	1.92−01	2.74−02	3.16+07	6.31+06
6380.750	33765–49433	1015	2–2	−.40	3.41	4.00−01	8.00−02	6.55+07	1.31+07
6392.550	18378–34017	109	2–1	−3.13	.68	7.41−04	1.48−04	1.21+05	4.03+04
6393.600	19621–35257	168	5–4	−1.10	2.71	7.94−02	7.22−03	1.30+07	1.44+06
6400.010	29056–44677	816	3–4	.28	4.09	1.91+00	2.72−01	3.10+08	3.45+07
6400.320	7377–22997	13	4–4	−3.91	−.10	1.23−04	1.37−05	2.00+04	2.23+03
6408.030	29733–45334	816	1–2	−.40	3.41	3.98−01	1.33−01	6.47+07	1.29+07
6411.660	29469–45061	816	2–3	−.01	3.80	9.77−01	1.95−01	1.59+08	2.27+07
6419.680	31805–47378	958	3–4	−1.38	2.43	4.19−02	5.98−03	6.77+06	7.53+05
6419.980	38175–53748	1258	3–3	.55	4.36	3.59+00	5.13−01	5.81+08	8.30+07
6421.360	18378–33947	111	2–2	−1.54	2.27	2.88−02	5.77−03	4.67+06	9.33+05
6430.850	17550–33096	62	3–4	−1.57	2.24	2.69−02	3.85−03	4.34+06	4.82+05
6436.430	33765–49298	1016	2–1	−1.24	2.57	5.71−02	1.14−02	9.19+06	3.06+06
6462.730	19788–35257	168	4–4	−2.00	1.81	1.00−02	1.11−03	1.60+06	1.77+05
6469.210	38996–54449	1258	1–1	.18	3.99	1.50+00	5.00−01	2.39+08	7.97+07
6475.630	20641–36079	206	4–3	−2.23	1.58	5.89−03	6.54−04	9.37+05	1.34+05
6481.880	18378–33802	109	2–2	−2.40	1.41	3.98−03	7.96−04	6.32+05	1.26+05
6494.510	38175–53569	1255	3–2	−.22	3.59	6.06−01	8.65−02	9.58+07	1.92+07
6494.980	19390–34782	168	6–5	−.86	2.95	1.38−01	1.06−02	2.18+07	1.98+06
6495.780	38996–54386	1253	1–1	.02	3.83	1.05+00	3.50−01	1.66+08	5.54+07
6496.460	38678–54067	1258	2–2	.28	4.09	1.90+00	3.79−01	3.00+08	5.99+07
6498.950	7728–23111	13	3–3	−4.22	−.41	6.03−05	8.61−06	9.52+03	1.36+03
6518.380	22838–38175	342	2–3	−1.93	1.88	1.17−02	2.35−03	1.84+06	2.63+05
6533.970	36767–52067	1197	3–2	−.63	3.19	2.37−01	3.38−02	3.70+07	7.39+06
6546.240	22249–37521	268	3–2	−1.18	2.64	6.61−02	9.44−03	1.03+07	2.06+06
6556.790	38678–53925	1255	2–1	−.82	2.99	1.51−01	3.01−02	2.34+07	7.78+06
6569.230	38175–53394	1253	3–4	.34	4.16	2.19+00	3.13−01	3.38+08	3.76+07
6574.240	7986–23193	13	2–2	−4.64	−.82	2.29−05	4.58−06	3.54+03	7.07+02
6575.020	20875–36079	206	3–3	−2.24	1.58	5.75−03	8.22−04	8.88+05	1.27+05
6581.220	11976–27167	34	4–4	−4.12	−.30	7.59−05	8.43−06	1.17+04	1.30+03
6591.320	37046–52213	1229	4–3	−1.01	2.81	9.84−02	1.09−02	1.51+07	2.16+06
6592.920	21999–37163	268	4–3	−1.10	2.72	7.94−02	8.83−03	1.22+07	1.74+06
6593.880	19621–34782	168	5–5	−2.03	1.79	9.33−03	8.48−04	1.43+06	1.30+05
6597.610	38678–53831	1253	2–3	−.28	3.54	5.26−01	1.05−01	8.06+07	1.15+07
6604.670	38996–54132	1254	1–1	−.81	3.01	1.56−01	5.19−02	2.38+07	7.94+06
6608.030	18378–33507	109	2–3	−3.33	.49	4.68−04	9.35−05	7.14+04	1.02+04
6609.120	20641–35768	206	4–4	−2.28	1.54	5.25−03	5.83−04	8.01+05	8.90+04
6625.040	8155–23245	13	1–1	−5.11	−1.29	7.76−06	2.59−06	1.18+03	3.93+02
6627.560	36686–51771	1174	4–3	−.72	3.10	1.89−01	2.10−02	2.87+07	4.10+06
6633.440	38996–54067	1258	1–2	−.53	3.29	2.94−01	9.79−02	4.45+07	8.90+06
6633.760	36767–51837	1197	3–3	−.13	3.69	7.42−01	1.06−01	1.12+08	1.61+07
6634.120	38678–53748	1258	2–3	−.55	3.28	2.85−01	5.70−02	4.32+07	6.17+06
6639.720	37158–52214	1195	2–1	−.84	2.99	1.46−01	2.91−02	2.20+07	7.34+06
6639.900	32874–47930	1007	4–4	−1.52	2.31	3.05−02	3.38−03	4.61+06	5.12+05
6648.120	8155–23193	13	1–2	−4.66	−.84	2.19−05	7.29−06	3.30+03	6.60+02
6653.880	33507–48532	1052	3–3	−1.77	2.05	1.70−02	2.43−03	2.56+06	3.66+05
6663.260	36767–51771	1195	3–3	−.70	3.12	1.98−01	2.83−02	2.97+07	4.25+06
6663.450	19552–34556	111	1–0	−2.05	1.77	8.91−03	2.97−03	1.34+06	1.34+06
6667.730	36976–51969	1228	3–3	−1.28	2.54	5.23−02	7.47−03	7.84+06	1.12+06
6677.990	21716–36686	268	5–4	−.92	2.90	1.20−01	1.09−02	1.80+07	2.00+06
6696.320	38996–53925	1255	1–1	−.94	2.88	1.14−01	3.81−02	1.70+07	5.66+06
6703.570	22249–37163	268	3–3	−2.53	1.30	2.95−03	4.22−04	4.38+05	6.26+04
6705.120	37158–52067	1197	2–2	−.44	3.39	3.67−01	7.33−02	5.44+07	1.09+07
6710.310	11976–26875	34	4–5	−4.46	−.63	3.47−05	3.85−06	5.14+03	4.67+02
6713.060	37158–52050	1195	2–2	−.66	3.17	2.20−01	4.41−02	3.26+07	6.52+06
6713.190	33413–48305	1013	3–2	−1.49	2.34	3.26−02	4.66−03	4.83+06	9.66+05
6713.760	38678–53569	1255	2–2	−.62	3.21	2.41−01	4.82−02	3.57+07	7.14+06
6715.410	37163–52050	1174	3–2	−.75	3.08	1.79−01	2.56−02	2.65+07	5.30+06
6716.240	36941–51826	1225	2–3	−.91	2.92	1.23−01	2.46−02	1.82+07	2.60+06

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
6717.560	37158–52040	1194	2–1	–.84	2.99	1.45–01	2.91–02	2.15+07	7.16+06
6725.390	33096–47961	1052	4–4	–1.36	2.47	4.41–02	4.90–03	6.50+06	7.23+05
6726.670	37158–52020	1197	2–1	–.41	3.42	3.90–01	7.80–02	5.75+07	1.92+07
6733.160	37410–52257	1195	1–0	–.56	3.26	2.73–01	9.09–02	4.01+07	4.01+07
6738.020	36767–51604	1192	3–3	–.77	3.06	1.69–01	2.41–02	2.48+07	3.54+06
6750.150	19552–34363	111	1–1	–2.11	1.72	7.76–03	2.59–03	1.14+06	3.79+05
6752.720	37410–52214	1195	1–1	–.42	3.41	3.83–01	1.28–01	5.60+07	1.87+07
6786.880	33802–48532	1052	2–3	–1.06	2.77	8.72–02	1.74–02	1.26+07	1.80+06
6793.260	32874–47590	1005	4–4	–1.33	2.50	4.63–02	5.15–03	6.70+06	7.44+05
6796.110	33413–48123	1007	3–3	–1.14	2.69	7.22–02	1.03–02	1.04+07	1.49+06
6804.020	37521–52214	1174	2–1	–.48	3.36	3.33–01	6.67–02	4.80+07	1.60+07
6804.270	36976–51668	1225	3–4	–.78	3.05	1.66–01	2.37–02	2.39+07	2.66+06
6806.850	21999–36686	268	4–4	–2.47	1.36	3.39–03	3.76–04	4.88+05	5.42+04
6810.280	37158–51837	1197	2–3	–.22	3.61	6.03–01	1.21–01	8.67+07	1.24+07
6820.430	37410–52067	1197	1–2	–.30	3.54	5.06–01	1.69–01	7.25+07	1.45+07
6828.610	37410–52050	1195	1–2	–.01	3.83	9.84–01	3.28–01	1.41+08	2.82+07
6837.000	37046–51668	1225	4–4	–.58	3.26	2.63–01	2.93–02	3.76+07	4.18+06
6839.830	20641–35257	205	4–4	–2.62	1.22	2.40–03	2.67–04	3.42+05	3.80+04
6841.350	37158–51771	1195	2–3	.12	3.95	1.31+00	2.62–01	1.86+08	2.66+07
6842.670	37410–52020	1197	1–1	–.25	3.59	5.64–01	1.88–01	8.03+07	2.68+07
6843.670	36686–51294	1173	4–3	–.05	3.78	8.91–01	9.89–02	1.27+08	1.81+07
6855.180	36767–51351	1195	3–4	.23	4.07	1.71+00	2.44–01	2.43+08	2.70+07
6857.250	32874–47453	1006	4–4	–1.09	2.75	8.19–02	9.10–03	1.16+07	1.29+06
6858.160	37163–51740	1173	3–2	–.04	3.80	9.22–01	1.32–01	1.31+08	2.62+07
6861.930	19552–34122	109	1–0	–2.99	.85	1.02–03	3.41–04	1.45+05	1.45+05
6862.480	36767–51335	1191	3–4	–.49	3.35	3.25–01	4.64–02	4.60+07	5.11+06
6885.770	37521–52040	1173	2–1	–.22	3.62	6.06–01	1.21–01	8.53+07	2.84+07
6916.700	33507–47961	1052	3–4	–.53	3.31	2.98–01	4.26–02	4.16+07	4.62+06
6933.630	19621–34040	167	5–4	–2.81	1.03	1.55–03	1.41–04	2.15+05	2.39+04
6945.210	19552–33947	111	1–2	–1.85	1.99	1.41–02	4.71–03	1.95+06	3.91+05
6947.500	36976–51365	1221	3–3	–.36	3.49	4.40–01	6.29–02	6.08+07	8.69+06
6951.260	36767–51149	1193	3–2	–.21	3.63	6.19–01	8.85–02	8.55+07	1.71+07
6976.310	37410–51740	1194	1–2	–.61	3.24	2.48–01	8.27–02	3.40+07	6.80+06
6976.930	36976–51305	1221	3–4	–.60	3.24	2.51–01	3.59–02	3.44+07	3.83+06
6977.440	37046–51374	1225	4–5	–.55	3.30	2.84–01	3.16–02	3.90+07	3.54+06
6978.860	20038–34363	111	0–1	–1.86	1.98	1.38–02	1.38–02	1.89+06	6.30+05
6988.530	19390–33695	167	6–5	–2.64	1.20	2.29–03	1.76–04	3.13+05	2.84+04
6999.900	33096–47378	1051	4–4	–.56	3.29	2.77–01	3.07–02	3.76+07	4.18+06
7000.630	33413–47693	1005	3–3	–.95	2.89	1.12–01	1.60–02	1.52+07	2.17+06
7008.010	33695–47961	1078	5–4	–.85	3.00	1.43–01	1.30–02	1.94+07	2.15+06
7010.360	36941–51201	1221	2–2	–.47	3.38	3.42–01	6.85–02	4.65+07	9.30+06
7011.360	37046–51305	1221	4–4	–.38	3.47	4.17–01	4.63–02	5.66+07	6.29+06
7016.080	19552–33802	109	1–2	–2.68	1.17	2.09–03	6.96–04	2.83+05	5.66+04
7016.440	33507–47756	1051	3–3	–.40	3.45	3.98–01	5.68–02	5.39+07	7.70+06
7022.980	33802–48037	1051	2–2	–.35	3.49	4.43–01	8.86–02	5.99+07	1.20+07
7024.080	32874–47107	1003	4–4	–1.07	2.77	8.46–02	9.39–03	1.14+07	1.27+06
7024.650	36767–50999	1187	3–2	–.35	3.50	4.51–01	6.44–02	6.09+07	1.22+07
7038.250	34017–48221	1051	1–1	–.33	3.52	4.69–01	1.56–01	6.32+07	2.11+07
7038.820	34329–48532	1078	3–3	–.80	3.05	1.59–01	2.27–02	2.14+07	3.05+06
7068.420	32874–47017	1004	4–3	–.41	3.44	3.85–01	4.28–02	5.14+07	7.35+06
7071.880	37158–51294	1194	2–3	–.63	3.22	2.34–01	4.68–02	3.12+07	4.46+06
7083.400	39626–53739	1277	4–5	–.08	3.77	8.40–01	9.33–02	1.12+08	1.02+07
7086.760	29056–43163	815	3–4	–1.57	2.28	2.69–02	3.85–03	3.57+06	3.97+05
7090.400	34122–48221	1051	0–1	–.08	3.77	8.34–01	8.34–01	1.11+08	3.69+07
7091.830	39970–54067	1278	3–2	–.13	3.72	7.38–01	1.05–01	9.78+07	1.96+07
7093.090	36767–50861	1189	3–2	–.68	3.17	2.07–01	2.96–02	2.75+07	5.50+06
7095.420	33947–48037	1105	2–2	–.89	2.96	1.28–01	2.56–02	1.69+07	3.39+06
7107.460	33765–47831	1005	2–2	–.92	2.93	1.21–01	2.41–02	1.59+07	3.18+06
7112.180	24119–38175	404	4–3	–2.19	1.66	6.46–03	7.17–04	8.51+05	1.22+05
7118.100	40405–54449	1278	1–1	–.14	3.71	7.18–01	2.39–01	9.45+07	3.15+07
7120.030	36767–50808	1187	3–4	–.67	3.19	2.16–01	3.08–02	2.84+07	3.15+06
7130.940	34017–48037	1051	1–2	.13	3.98	1.34+00	4.46–01	1.75+08	3.51+07
7132.990	32874–46889	1002	4–4	–.63	3.23	2.37–01	2.63–02	3.10+07	3.45+06
7142.520	39970–53967	1274	3–2	14	3.99	1.38+00	1.97–01	1.81+08	3.61+07
7145.320	37158–51149	1186	2–2	–.26	3.60	5.52–01	1.10–01	7.21+07	1.44+07
7148.690	34547–48532	1078	2–3	–.91	2.94	1.23–01	2.46–02	1.61+07	2.30+06
7151.500	20038–34017	109	0–1	–2.62	1.23	2.40–03	2.40–03	3.13+05	1.04+05
7155.640	40405–54376	1276	1–2	.12	3.98	1.32+00	4.40–01	1.72+08	3.44+07
7164.470	33802–47756	1051	2–3	.24	4.09	1.74+00	3.47–01	2.26+08	3.22+07
7175.940	36767–50699	1188	3–2	–.30	3.55	4.99–01	7.14–02	6.47+07	1.29+07

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
7176.890	40231−54161	1276	2−3	.20	4.06	1.60+00	3.20−01	2.08+08	2.96+07
7180.020	11976−25900	33	4−4	−3.92	−.06	1.20−04	1.34−05	1.56+04	1.73+03
7181.220	34040−47961	1078	4−4	−.34	3.52	4.62−01	5.13−02	5.97+07	6.64+06
7181.930	39626−53546	1274	4−3	−.04	3.82	9.13−01	1.01−01	1.18+08	1.69+07
7187.340	33096−47006	1051	4−5	.58	4.43	3.76+00	4.18−01	4.86+08	4.42+07
7189.170	24772−38678	463	1−2	−1.81	2.05	1.55−02	5.16−03	2.00+06	4.00+05
7190.130	25092−38996	463	0−1	−2.10	1.76	7.94−03	7.94−03	1.02+06	3.42+05
7191.660	40231−54132	1274	2−1	.05	3.91	1.13+00	2.26−01	1.46+08	4.85+07
7194.920	40491−54386	1273	0−1	.07	3.93	1.18+00	1.18+00	1.52+08	5.06+07
7207.410	33507−47378	1051	3−4	.45	4.31	2.83+00	4.04−01	3.63+08	4.04+07
7212.470	39970−53831	1273	3−3	.08	3.94	1.20+00	1.72−01	1.54+08	2.21+07
7219.690	32874−46721	1001	4−4	−.76	3.10	1.75−01	1.94−02	2.23+07	2.48+06
7221.220	36767−50611	1189	3−3	−.35	3.51	4.51−01	6.44−02	5.77+07	8.24+06
7222.880	37158−50999	1187	2−2	−.64	3.22	2.31−01	4.62−02	2.96+07	5.91+06
7223.670	24336−38175	463	2−3	−1.54	2.32	2.88−02	5.77−03	3.69+06	5.27+05
7228.690	22249−36079	267	3−3	−2.52	1.34	3.02−03	4.31−04	3.85+05	5.51+04
7239.880	33947−47756	1105	2−3	−.44	3.42	3.63−01	7.26−02	4.62+07	6.59+06
7244.860	39970−53769	1276	3−4	.12	3.98	1.31+00	1.87−01	1.66+08	1.85+07
7256.140	39970−53748	1278	3−3	−.33	3.54	4.73−01	6.76−02	5.99+07	8.56+06
7261.020	21999−35768	267	4−4	−2.72	1.14	1.91−03	2.12−04	2.41+05	2.68+04
7261.540	36767−50534	1188	3−3	−.31	3.55	4.90−01	7.00−02	6.20+07	8.86+06
7282.390	40405−54132	1274	1−1	−.05	3.81	8.97−01	2.99−01	1.13+08	3.76+07
7284.840	33413−47136	1004	3−2	−.70	3.16	1.98−01	2.83−02	2.49+07	4.99+06
7288.760	34040−47756	1077	4−3	−.43	3.43	3.71−01	4.12−02	4.66+07	6.66+06
7293.070	34329−48037	1077	3−2	−.19	3.67	6.40−01	9.15−02	8.03+07	1.61+07
7295.000	37158−50862	1187	2−3	−.57	3.29	2.67−01	5.34−02	3.35+07	4.78+06
7300.470	40231−53925	1275	2−1	−.19	3.67	6.42−01	1.28−01	8.04+07	2.68+07
7306.610	33695−47378	1077	5−4	−.71	3.16	1.96−01	1.78−02	2.45+07	2.72+06
7307.940	33413−47093	1002	3−3	−.54	3.32	2.86−01	4.09−02	3.58+07	5.11+06
7311.100	34547−48221	1077	2−1	−.26	3.61	5.51−01	1.10−01	6.88+07	2.29+07
7320.690	36767−50423	1188	3−4	−.17	3.70	6.84−01	9.77−02	8.51+07	9.46+06
7330.150	37410−51048	1187	1−1	−.63	3.23	2.33−01	7.75−02	2.89+07	9.62+06
7333.620	34329−47961	1078	3−4	−.89	2.98	1.30−01	1.86−02	1.61+07	1.79+06
7351.160	40231−53831	1273	2−3	−.07	3.80	8.53−01	1.71−01	1.05+08	1.50+07
7351.560	39970−53569	1275	3−2	.21	4.08	1.63+00	2.33−01	2.01+08	4.02+07
7353.530	38175−51771	1251	3−3	−.34	3.52	4.53−01	6.48−02	5.59+07	7.99+06
7363.960	39970−53546	1274	3−3	−.14	3.73	7.26−01	1.04−01	8.92+07	1.27+07
7366.370	37410−50981	1188	1−0	−.61	3.26	2.47−01	8.24−02	3.04+07	3.04+07
7370.160	38175−51740	1250	3−2	−.54	3.33	2.92−01	4.17−02	3.58+07	7.16+06
7382.990	37158−50699	1188	2−2	−.41	3.46	3.88−01	7.75−02	4.74+07	9.49+06
7386.390	39626−53161	1275	4−3	.46	4.33	2.91+00	3.24−01	3.56+08	5.09+07
7389.420	34692−48221	1077	1−1	.20	4.07	1.59+00	5.30−01	1.94+08	6.47+07
7401.690	33765−47272	1004	2−1	−.65	3.22	2.24−01	4.48−02	2.72+07	9.08+06
7411.180	34547−48037	1077	2−2	.29	4.16	1.93+00	3.87−01	2.35+08	4.70+07
7418.670	33413−46889	1001	3−2	−.55	3.32	2.84−01	4.06−02	3.45+07	6.89+06
7430.580	20875−34329	204	3−3	−2.54	1.33	2.88−03	4.12−04	3.48+05	4.98+04
7440.980	39626−53061	1273	4−5	.23	4.10	1.69+00	1.88−01	2.03+08	1.85+07
7443.030	33765−47197	1002	2−2	−.74	3.13	1.81−01	3.63−02	2.18+07	4.37+06
7445.780	34329−47756	1077	3−3	.54	4.41	3.46+00	4.95−01	4.17+08	5.95+07
7447.430	39970−53394	1273	3−4	.03	3.90	1.07+00	1.53−01	1.29+08	1.43+07
7461.530	20641−34040	204	4−4	−2.58	1.29	2.63−03	2.92−04	3.15+05	3.50+04
7491.680	34692−48037	1077	1−2	−.22	3.65	5.98−01	1.99−01	7.10+07	1.42+07
7495.090	34040−47378	1077	4−4	.61	4.49	4.09+00	4.54−01	4.86+08	5.40+07
7498.560	33413−46745	1001	3−3	−1.13	2.75	7.45−02	1.06−02	8.84+06	1.26+06
7506.030	40842−54161	1306	3−3	−.08	3.80	8.41−01	1.20−01	9.96+07	1.42+07
7507.300	35612−48928	1137	3−2	−.18	3.70	6.66−01	9.51−02	7.88+07	1.58+07
7511.040	33695−47006	1077	5−5	.79	4.66	6.10+00	5.55−01	7.22+08	6.56+07
7531.170	35257−48532	1137	4−3	.22	4.10	1.66+00	1.85−01	1.95+08	2.79+07
7568.920	34547−47756	1077	2−3	−.12	3.76	7.58−01	1.52−01	8.82+07	1.26+07
7583.800	24339−37521	402	3−2	−1.24	2.64	5.75−02	8.22−03	6.67+06	1.33+06
7586.040	34782−47961	1137	5−4	.45	4.33	2.85+00	2.59−01	3.30+08	3.67+07
7605.320	40594−53739	1308	4−5	−.03	3.86	9.42−01	1.05−01	1.09+08	9.88+06
7620.540	38175−51294	1250	3−3	.30	4.18	1.99+00	2.85−01	2.29+08	3.27+07
7653.780	38678−51740	1250	2−2	−.05	3.84	9.01−01	1.80−01	1.03+08	2.05+07
7661.220	34329−47378	1077	3−4	−.20	3.69	6.34−01	9.05−02	7.20+07	8.00+06
7664.300	24119−37163	402	4−3	−1.06	2.82	8.71−02	9.68−03	9.89+06	1.41+06
7710.390	34040−47006	1077	4−5	−.33	3.55	4.63−01	5.14−02	5.19+07	4.72+06
7719.050	40594−53546	1304	4−3	−.04	3.85	9.13−01	1.01−01	1.02+08	1.46+07
7723.200	18378−31323	108	2−3	−2.79	1.10	1.62−03	3.24−04	1.81+05	2.59+04
7742.710	40257−53169	1306	5−6	−.08	3.81	8.41−01	7.64−02	9.35+07	7.20+06

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*)	Log (*gf*λ)	*gf*	*f*	*g*A	A
7748.280	23784–36686	402	5–4	–1.00	2.89	1.00–01	9.09–03	1.11+07	1.23+06
7751.180	40257–53155	1304	5–4	.14	4.03	1.39+00	1.27–01	1.55+08	1.72+07
7780.590	36079–48928	1154	3–2	.59	4.48	3.92+00	5.60–01	4.32+08	8.64+07
7807.920	40257–53061	1303	5–5	.14	4.03	1.37+00	1.25–01	1.50+08	1.36+07
7832.220	35768–48532	1154	4–3	.64	4.53	4.37+00	4.85–01	4.75+08	6.79+07
7855.480	40842–53569	1305	3–2	–.05	3.85	8.96–01	1.28–01	9.68+07	1.94+07
7869.650	35257–47961	1137	4–4	–.91	2.99	1.24–01	1.38–02	1.34+07	1.49+06
7912.870	6928–19562	12	5–4	–4.30	–.40	5.01–05	4.56–06	5.34+03	5.93+02
7937.170	34782–47378	1136	5–4	.63	4.53	4.28+00	3.89–01	4.53+08	5.04+07
7941.090	26406–38996	623	1–1	–1.69	2.21	2.04–02	6.81–03	2.16+06	7.20+05
7945.880	35379–47961	1154	5–4	.67	4.57	4.73+00	4.30–01	4.99+08	5.55+07
7998.970	35257–47756	1136	4–3	.68	4.58	4.78+00	5.31–01	4.99+08	7.12+07
8028.340	36079–48532	1154	3–3	.01	3.91	1.02+00	1.46–01	1.06+08	1.51+07
8046.070	35612–48037	1136	3–2	.67	4.57	4.64+00	6.63–01	4.78+08	9.56+07
8047.600	6928–19351	12	5–5	–4.11	–.20	7.76–05	7.06–06	7.99+03	7.27+02
8075.130	7377–19757	12	4–3	–4.54	–.63	2.88–05	3.20–06	2.95+03	4.21+02
8080.670	26624–38996	623	2–1	–1.81	2.10	1.55–02	3.10–03	1.58+06	5.27+05
8085.200	35856–48221	1136	2–1	.61	4.52	4.09+00	8.17–01	4.17+08	1.39+08
8096.870	32874–45221	999	4–3	–.98	2.93	1.05–01	1.16–02	1.07+07	1.52+06
8186.800	39626–51837	1272	4–3	–.07	3.84	8.52–01	9.47–02	8.48+07	1.21+07
8198.950	35768–47961	1154	4–4	.05	3.97	1.13+00	1.26–01	1.12+08	1.25+07
8207.770	35856–48037	1136	2–2	–.10	3.81	7.88–01	1.58–01	7.80+07	1.56+07
8220.410	34844–47006	1136	6–5	.94	4.85	8.62+00	6.63–01	8.51+08	7.74+07
8232.350	35612–47756	1136	3–3	–.06	3.86	8.70–01	1.24–01	8.56+07	1.22+07
8239.130	19552–31686	108	1–2	–2.60	1.32	2.51–03	8.37–04	2.47+05	4.94+04
8248.150	35257–47378	1136	4–4	–.24	3.68	5.78–01	6.42–02	5.66+07	6.29+06
8274.280	40871–52954	1332	3–3	.00	3.92	1.00+00	1.43–01	9.75+07	1.39+07
8275.910	39970–52050	1270	3–2	–.11	3.81	7.82–01	1.12–01	7.61+07	1.52+07
8293.530	26624–38678	623	2–2	–1.54	2.38	2.88–02	5.77–03	2.80+06	5.59+05
8327.060	17727–29733	60	2–1	–1.07	2.85	8.51–02	1.70–02	8.19+06	2.73+06
8331.940	35379–47378	1153	5–4	.41	4.33	2.58+00	2.35–01	2.48+08	2.76+07
8339.430	35768–47756	1153	4–3	.12	4.04	1.32+00	1.46–01	1.26+08	1.80+07
8342.950	40231–52214	1270	2–1	–.13	3.79	7.47–01	1.49–01	7.15+07	2.38+07
8360.820	36079–48037	1153	3–2	–1.16	2.76	6.86–02	9.80–03	6.55+06	1.31+06
8365.640	26225–38175	623	3–3	–1.46	2.46	3.47–02	4.95–03	3.30+06	4.72+05
8387.780	17550–29469	60	3–2	–1.09	2.83	8.13–02	1.16–02	7.71+06	1.54+06
8439.600	36686–48532	1172	4–3	.00	3.93	1.00+00	1.11–01	9.37+07	1.34+07
8468.410	17927–29733	60	1–1	–1.56	2.37	2.75–02	9.18–03	2.56+06	8.54+05
8471.750	39970–51771	1270	3–3	–.08	3.84	8.25–01	1.18–01	7.67+07	1.10+07
8497.000	37163–48928	1172	3–2	–.11	3.82	7.82–01	1.12–01	7.23+07	1.45+07
8514.080	17727–29469	60	2–2	–1.70	2.23	2.00–02	3.99–03	1.84+06	3.67+05
8515.080	24339–36079	401	3–3	–1.37	2.56	4.27–02	6.09–03	3.92+06	5.61+05
8526.680	39626–51351	1270	4–4	.20	4.13	1.60+00	1.77–01	1.46+08	1.63+07
8538.020	39626–51335	1266	4–4	–.22	3.71	6.05–01	6.72–02	5.54+07	6.15+06
8562.110	36079–47756	1153	3–3	–.90	3.03	1.26–01	1.80–02	1.14+07	1.63+06
8571.810	40405–52067	1272	1–2	–.28	3.66	5.30–01	1.77–01	4.81+07	9.62+06
8582.270	24119–35768	401	4–4	–1.62	2.31	2.40–02	2.67–03	2.17+06	2.41+05
8592.970	39970–51604	1267	3–3	.03	3.96	1.06+00	1.52–01	9.61+07	1.37+07
8598.790	35379–47006	1153	5–5	–.46	3.47	3.43–01	3.12–02	3.10+07	2.81+06
8611.810	22947–34556	339	1–0	–1.31	2.63	4.90–02	1.63–02	4.40+06	4.40+06
8616.280	39626–51229	1266	4–5	–.41	3.52	3.86–01	4.28–02	3.46+07	3.15+06
8621.610	23784–35379	401	5–5	–1.75	2.19	1.78–02	1.62–03	1.60+06	1.45+05
8661.910	17927–29469	60	1–2	–1.11	2.83	7.76–02	2.59–02	6.90+06	1.38+06
8674.750	22838–34363	339	2–1	–1.14	2.80	7.24–02	1.45–02	6.42+06	2.14+06
8688.630	17550–29056	60	3–3	–.79	3.15	1.62–01	2.32–02	1.43+07	2.05+06
8699.430	39970–51462	1267	3–4	.33	4.27	2.13+00	3.05–01	1.88+08	2.09+07
8710.290	39626–51103	1267	4–5	.41	4.35	2.57+00	2.85–01	2.26+08	2.05+07
8713.190	23784–35257	400	5–4	–1.93	2.01	1.17–02	1.07–03	1.03+06	1.15+05
8757.190	22947–34363	339	1–1	–1.18	2.76	6.61–02	2.20–02	5.75+06	1.92+06
8764.000	37521–48928	1172	2–2	.58	4.53	3.83+00	7.66–01	3.33+08	6.65+07
8784.440	39970–51351	1270	3–4	.05	4.00	1.13+00	1.61–01	9.76+07	1.08+07
8790.620	40231–51604	1267	2–3	.26	4.20	1.81+00	3.61–01	1.56+08	2.23+07
8793.380	37163–48532	1172	3–3	.51	4.45	3.24+00	4.63–01	2.79+08	3.99+07
8804.620	18378–29733	106	2–1	–2.44	1.50	3.63–03	7.26–04	3.12+05	1.04+05
8808.170	40405–51755	1267	1–1	.20	4.14	1.57+00	5.23–01	1.35+08	4.50+07
8824.230	17727–29056	60	2–3	–1.04	2.91	9.12–02	1.82–02	7.81+06	1.12+06
8838.430	23052–34363	339	0–1	–1.27	2.68	5.37–02	5.37–02	4.59+06	1.53+06
8846.820	40405–51705	1267	1–2	.33	4.28	2.15+00	7.17–01	1.83+08	3.67+07
8866.960	36686–47961	1172	4–4	.69	4.64	4.95+00	5.50–01	4.20+08	4.66+07
8868.420	24339–35612	400	3–3	–1.86	2.09	1.38–02	1.97–03	1.17+06	1.67+05

TABLE 1.—*Oscillator Strengths and Transition Probabilities for 3288 Lines of* Fe I *in Order of Wavelength*—Continued

Wavelength Å	Energy Levels K	Multiplet No.	*J*-Values	Log (*gf*).	Log (*gf*λ)	*gf*	*f*	*g*A	A
8876.130	40491–51755	1267	0–1	.34	4.28	2.17+00	2.17+00	1.83+08	6.11+07
8919.950	40842–52050	1301	3–2	.53	4.48	3.41+00	4.88–01	2.86+08	5.72+07
8929.040	41018–52214	1301	2–1	.42	4.37	2.65+00	5.30–01	2.22+08	7.39+07
8943.000	22838–34017	338	2–1	–1.97	1.98	1.07–02	2.14–03	8.94+05	2.98+05
8945.200	40594–51771	1301	4–3	.72	4.67	5.21+00	5.79–01	4.34+08	6.20+07
8975.410	24119–35257	400	4–4	–1.46	2.49	3.47–02	3.85–03	2.87+06	3.19+05
8984.870	41131–52257	1301	1–0	.44	4.39	2.73+00	9.09–01	2.25+08	2.25+08
8999.560	22838–33947	339	2–2	–.59	3.36	2.57–01	5.14–02	2.12+07	4.23+06
9006.720	40231–51331	1261	2–2	–.02	3.94	9.59–01	1.92–01	7.88+07	1.58+07
9008.370	40871–51969	1329	3–3	.28	4.23	1.90+00	2.71–01	1.56+08	2.23+07
9010.550	21039–32134	202	2–2	–2.17	1.78	6.76–03	1.35–03	5.55+05	1.11+05
9012.100	40257–51351	1301	5–4	.86	4.82	7.29+00	6.63–01	5.99+08	6.65+07
9013.900	18378–29469	106	2–2	–2.67	1.28	2.14–03	4.28–04	1.76+05	3.51+04
9019.840	41131–52214	1301	1–1	.10	4.06	1.27+00	4.23–01	1.04+08	3.46+07
9024.470	39626–50704	1265	4–5	.43	4.38	2.68+00	2.98–01	2.20+08	2.00+07
9062.240	41018–52050	1301	2–2	.14	4.10	1.39+00	2.78–01	1.13+08	2.26+07
9070.420	34040–45061	1076	4–3	–.76	3.20	1.74–01	1.93–02	1.41+07	2.01+06
9079.600	37521–48532	1172	2–3	.12	4.08	1.32+00	2.64–01	1.07+08	1.52+07
9080.480	40594–51604	1298	4–3	.34	4.30	2.17+00	2.41–01	1.76+08	2.51+07
9088.330	22947–33947	339	1–2	–1.11	2.85	7.76–02	2.59–02	6.27+06	1.25+06
9089.410	23784–34782	400	5–5	–1.13	2.83	7.41–02	6.74–03	5.98+06	5.44+05
9100.500	39626–50611	1264	4–3	.30	4.26	2.01+00	2.24–01	1.62+08	2.32+07
9103.640	33695–44677	1076	5–4	–.79	3.17	1.62–01	1.47–02	1.31+07	1.45+06
9117.100	23052–34017	338	0–1	–1.95	2.01	1.12–02	1.12–02	9.00+05	3.00+05
9118.890	22838–33802	338	2–2	–1.31	2.65	4.90–02	9.80–03	3.93+06	7.86+05
9146.110	20875–31805	202	3–3	–2.08	1.88	8.32–03	1.19–03	6.63+05	9.47+04
9147.800	40842–51771	1301	3–3	.47	4.43	2.93+00	4.18–01	2.33+08	3.33+07
9173.120	21039–31937	203	2–1	–2.25	1.71	5.62–03	1.12–03	4.46+05	1.49+05
9173.460	40842–51740	1300	3–2	.28	4.25	1.93+00	2.75–01	1.53+08	3.05+07
9178.570	39970–50862	1262	3–3	–.05	3.91	8.85–01	1.26–01	7.00+07	1.00+07
9210.030	22947–33802	338	1–2	–1.63	2.33	2.34–02	7.81–03	1.84+06	3.69+05
9214.450	39626–50475	1264	4–4	.36	4.32	2.28+00	2.53–01	1.79+08	1.99+07
9217.540	40257–51103	1298	5–5	.36	4.32	2.29+00	2.08–01	1.80+08	1.63+07
9233.180	42912–53739	1342	5–5	.23	4.20	1.71+00	1.56–01	1.34+08	1.22+07
9242.320	40231–51048	1262	2–1	.08	4.04	1.19+00	2.38–01	9.31+07	3.10+07
9246.540	20875–31686	203	3–2	–2.19	1.78	6.46–03	9.22–04	5.04+05	1.01+05
9258.300	37163–47961	1172	3–4	.20	4.17	1.60+00	2.29–01	1.25+08	1.38+07
9259.050	39626–50423	1263	4–4	.37	4.34	2.37+00	2.63–01	1.84+08	2.05+07
9294.660	40594–51351	1301	4–4	.24	4.21	1.75+00	1.94–01	1.35+08	1.50+07
9307.940	40594–51335	1297	4–4	.21	4.18	1.63+00	1.81–01	1.25+08	1.39+07
9318.130	39970–50699	1263	3–2	.13	4.10	1.34+00	1.92–01	1.03+08	2.07+07
9343.400	40594–51294	1300	4–3	.25	4.22	1.78+00	1.97–01	1.36+08	1.94+07
9350.460	36686–47378	1171	4–4	.01	3.98	1.03+00	1.14–01	7.84+07	8.71+06
9359.420	20641–31323	203	4–3	–2.25	1.72	5.62–03	6.25–04	4.28+05	6.12+04
9362.370	18378–29056	106	2–3	–2.43	1.54	3.72–03	7.43–04	2.83+05	4.04+04
9372.900	20641–31307	202	4–4	–2.11	1.86	7.76–03	8.62–04	5.89+05	6.55+04
9394.710	39970–50611	1264	3–3	–.12	3.86	7.66–01	1.09–01	5.79+07	8.27+06
9401.090	40594–51229	1297	4–5	.44	4.41	2.73+00	3.03–01	2.06+08	1.87+07
9414.140	40842–51462	1298	3–4	.64	4.61	4.35+00	6.22–01	3.28+08	3.64+07
9437.910	37163–47756	1171	3–3	–.42	3.55	3.80–01	5.43–02	2.84+07	4.06+06
9443.980	41018–51604	1298	2–3	.57	4.54	3.69+00	7.38–01	2.76+08	3.94+07
9452.450	40405–50981	1263	1–0	.14	4.12	1.39+00	4.63–01	1.04+08	1.04+08
9454.240	41131–51705	1298	1–2	.35	4.33	2.25+00	7.51–01	1.68+08	3.36+07
9462.970	39970–50534	1263	3–3	–.02	3.96	9.56–01	1.37–01	7.12+07	1.02+07
9513.240	40594–51103	1298	4–5	.73	4.71	5.36+00	5.96–01	3.95+08	3.59+07
9569.960	40257–50704	1296	5–5	.67	4.65	4.66+00	4.24–01	3.40+08	3.09+07
9626.560	40594–50980	1296	4–4	.86	4.85	7.29+00	8.10–01	5.25+08	5.83+07
9634.220	40842–51219	1296	3–3	.46	4.44	2.85+00	4.08–01	2.05+08	2.93+07
9653.140	38175–48532	1247	3–3	.44	4.43	2.76+00	3.94–01	1.97+08	2.82+07
9657.300	41018–51370	1296	2–2	.58	4.57	3.84+00	7.67–01	2.74+08	5.49+07
9699.700	40842–51149	1292	3–3	.46	4.45	2.90+00	4.14–01	2.05+08	2.93+07
9738.620	40257–50523	1296	5–6	1.20	5.19	1.58+01	1.44+00	1.11+09	8.57+07
9753.130	38678–48928	1247	2–2	.56	4.55	3.66+00	7.32–01	2.57+08	5.13+07
9763.450	41131–51370	1296	1–2	.73	4.72	5.42+00	1.81+00	3.79+08	7.58+07
9763.910	40594–50833	1292	4–5	.90	4.88	7.86+00	8.73–01	5.50+08	5.00+07
9800.340	41018–51219	1296	2–3	.90	4.89	7.86+00	1.57+00	5.46+08	7.80+07
9861.790	40842–50980	1296	3–4	.75	4.75	5.66+00	8.09–01	3.88+08	4.31+07
9889.080	40594–50704	1296	4–5	.91	4.90	8.10+00	9.01–01	5.53+08	5.03+07

TABLE 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*

Wave length Å	Energy Levels K	*J*-values	A
5166.290	0–19351	4–5	4.75+03
8047.600	6928–19351	5–5	7.27+02
5110.410	0–19562	4–4	1.30+04
7912.870	6928–19562	5–4	5.93+02
5060.080	0–19757	4–3	1.70+02
5168.900	416–19757	3–3	1.15+04
5247.060	704–19757	2–3	1.09+03
8075.130	7377–19757	4–3	4.21+02
5204.590	704–19913	2–2	8.36+03
5254.960	888–19913	1–2	2.84+03
5225.530	888–20020	1–1	4.47+03
5250.210	978–20020	0–1	2.80+03
6358.690	6928–22650	5–6	1.27+03
4375.930	0–22846	4–5	8.14+04
6280.620	6928–22846	5–5	1.57+03
4347.240	0–22997	4–4	3.83+02
4427.310	416–22997	3–4	1.17+05
6400.320	7377–22997	4–4	2.23+03
4461.650	704–23111	2–3	9.33+04
6498.950	7728–23111	3–3	1.36+03
4389.250	416–23193	3–2	8.72+03
4445.480	704–23193	2–2	9.11+02
4482.170	888–23193	1–2	9.38+04
6574.240	7986–23193	2–2	7.07+02
6648.120	8155–23193	1–2	6.60+02
4435.150	704–23245	2–1	1.83+04
4471.680	888–23245	1–1	8.05+02
4489.740	978–23245	0–1	4.39+04
6625.040	8155–23245	1–1	3.93+02
4216.190	0–23711	4–4	4.37+04
4291.470	416–23711	3–4	1.24+04
5956.700	6928–23711	5–4	1.82+03
4134.340	0–24181	4–3	3.95+03
4206.700	416–24181	3–3	2.05+04
4258.320	704–24181	2–3	1.12+04
5949.350	7377–24181	4–3	1.45+03
4149.767	416–24507	3–2	1.17+03
4199.970	704–24507	2–2	4.66+03
4232.730	888–24507	1–2	5.91+03
3859.913	0–25900	4–4	1.34+07
3922.913	416–25900	3–4	1.75+06
5269.540	6928–25900	5–4	1.19+06
5397.130	7377–25900	4–4	3.35+05
5501.470	7728–25900	3–4	5.36+04
7180.020	11976–25900	4–4	1.73+03
3824.446	0–26140	4–3	4.40+06
3886.284	416–26140	3–3	7.24+06
3930.298	704–26140	2–3	3.02+06
5328.040	7377–26140	4–3	1.16+06
5429.700	7728–26140	3–3	5.36+05
5506.780	7986–26140	2–3	1.14+05
3856.373	416–26340	3–2	6.50+06
3899.709	704–26340	2–2	4.20+06
3927.922	888–26340	1–2	4.33+06
5371.490	7728–26340	3–2	1.16+06
5446.920	7986–26340	2–2	5.66+05
5497.520	8155–26340	1–2	1.43+05
3878.574	704–26479	2–1	9.76+06
3906.481	888–26479	1–1	1.75+06
3920.260	978–26479	0–1	4.79+06
5405.780	7986–26479	2–1	1.35+06
5455.610	8155–26479	1–1	6.97+05
3895.658	888–26550	1–0	1.60+07
5434.530	8155–26550	1–0	2.42+06
3719.937	0–26875	4–5	2.10+07
5012.070	6928–26875	5–5	9.39+04
5127.360	7377–26875	4–5	2.84+04
6710.310	11976–26875	4–5	4.67+02
3679.915	0–27167	4–4	2.74+06
3737.133	416–27167	3–4	1.68+07
4939.690	6928–27167	5–4	2.01+04
5051.640	7377–27167	4–4	5.66+04
5142.930	7728–27167	3–4	5.34+04
6581.220	11976–27167	4–4	1.30+03
3649.304	0–27395	4–3	2.11+05
3705.567	416–27395	3–3	5.51+06
3745.562	704–27395	2–3	1.59+07
4994.130	7377–27395	4–3	4.81+04
5083.340	7728–27395	3–3	6.71+04
5150.840	7986–27395	2–3	7.17+04
3683.056	416–27560	3–2	8.76+05
3722.564	704–27560	2–2	9.19+06
3748.264	888–27560	1–2	1.28+07
5041.070	7728–27560	3–2	9.77+04
5107.450	7986–27560	2–2	8.49+04
5151.920	8155–27560	1–2	7.43+04
3707.823	704–27666	2–1	2.68+06
3733.319	888–27666	1–1	1.05+07
3745.901	978–27666	0–1	1.20+07
5079.740	7986–27666	2–1	1.06+05
5123.720	8155–27666	1–1	1.37+05
3440.607	0–29056	4–3	2.92+07
3490.575	416–29056	3–3	7.82+06
3526.042	704–29056	2–3	2.31+06
4687.310	7728–29056	3–3	1.85+03
8688.630	17550–29056	3–3	2.05+06
8824.230	17727–29056	2–3	1.12+06
9362.370	18378–29056	2–3	4.04+04
3440.990	416–29469	3–2	1.71+07
3475.451	704–29469	2–2	1.60+07
3497.842	888–29469	1–2	5.86+06
4598.370	7728–29469	3–2	1.55+03
4690.380	8155–29469	1–2	2.84+03
8387.780	17550–29469	3–2	1.54+06
8514.080	17727–29469	2–2	3.67+05
8661.910	17927–29469	1–2	1.38+06
9013.900	18378–29469	2–2	3.51+04
3443.878	704–29733	2–1	1.52+07
3465.862	888–29733	1–1	2.13+07
3476.704	978–29733	0–1	1.06+07
8327.060	17727–29733	2–1	2.73+06
8468.410	17927–29733	1–1	8.54+05
8804.620	18378–29733	2–1	1.04+05
3193.227	0–31307	4–4	1.35+06
3236.223	416–31307	3–4	9.33+05
4100.739	6928–31307	5–4	1.13+05
4177.590	7377–31307	4–4	1.61+05
5171.600	11976–31307	4–4	1.45+06
5332.900	12561–31307	3–4	1.14+05
9372.900	20641–31307	4–4	6.55+04
3191.660	0–31323	4–3	9.35+05
3234.614	416–31323	3–3	6.91+05
3265.047	704–31323	2–3	5.91+05
4174.920	7377–31323	4–3	2.50+05
4237.080	7728–31323	3–3	3.59+04
5167.490	11976–31323	4–3	4.70+06
5328.530	12561–31323	3–3	1.06+06
7723.200	18378–31323	2–3	2.59+04
9359.420	20641–31323	4–3	6.12+04
3226.714	704–31686	2–2	6.72+04
3246.005	888–31686	1–2	1.05+06
4172.750	7728–31686	3–2	3.58+05
5227.190	12561–31686	3–2	7.06+06
5341.030	12969–31686	2–2	1.20+06
8239.130	19552–31686	1–2	4.94+04
9246.540	20875–31686	3–2	1.01+05
3143.243	0–31805	4–3	6.09+04
3184.896	416–31805	3–3	9.39+05
3214.396	704–31805	2–3	1.40+06
4092.512	7377–31805	4–3	1.16+04
4152.170	7728–31805	3–3	1.96+05
4197.100	7986–31805	2–3	1.05+04
5041.760	11976–31805	4–3	3.50+05
5194.940	12561–31805	3–3	8.28+05
5307.360	12969–31805	2–3	1.17+05
9146.110	20875–31805	3–3	9.47+04
3200.785	704–31937	2–1	3.36+05
3229.122	978–31937	0–1	1.12+06
4173.920	7986–31937	2–1	2.73+05
4203.570	8155–31937	1–1	7.58+04
5270.360	12969–31937	2–1	8.19+06
9173.120	21039–31937	2–1	1.49+05
3151.867	416–32134	3–2	1.65+05
3180.756	704–32134	2–2	7.25+05
4096.217	7728–32134	3–2	1.91+04
4139.929	7986–32134	2–2	1.13+05
5107.640	12561–32134	3–2	4.66+05
5216.280	12969–32134	2–2	1.10+06
9010.550	21039–32134	2–2	1.11+05
3020.640	0–33096	4–4	6.02+07
3059.087	416–33096	3–4	2.88+07
3820.427	6928–33096	5–4	1.31+08
3887.050	7377–33096	4–4	7.60+06
3940.880	7728–33096	3–4	4.45+05
4733.600	11976–33096	4–4	1.38+05
6430.850	17550–33096	3–4	4.82+05
2983.571	0–33507	4–3	4.67+07
3021.074	416–33507	3–3	6.74+07
3047.606	704–33507	2–3	4.80+07
3825.883	7377–33507	4–3	1.18+08
3878.021	7728–33507	3–3	1.79+07
3917.183	7986–33507	2–3	1.46+06
4643.220	11976–33507	4–3	1.64+03
6265.140	17550–33507	3–3	2.43+05
6335.340	17727–33507	2–3	3.28+05
6608.030	18378–33507	2–3	1.02+04
2966.900	0–33695	4–5	4.25+07
3734.866	6928–33695	5–5	1.62+08
3798.513	7377–33695	4–5	8.39+06
4602.940	11976–33695	4–5	9.92+05
6988.530	19390–33695	6–5	2.84+04
2994.428	416–33802	3–2	6.65+07
3037.390	888–33802	1–2	5.37+07
3834.224	7728–33802	3–2	9.29+07
3872.503	7986–33802	2–2	2.39+07
3898.011	8155–33802	1–2	3.34+06
4798.740	12969–33802	2–2	6.21+04
6151.620	17550–33802	3–2	6.87+04
6219.290	17727–33802	2–2	3.15+05
6297.800	17927–33802	1–2	1.65+05
6481.880	18378–33802	2–2	1.26+05
7016.080	19552–33802	1–2	5.66+04
9118.890	22838–33802	2–2	7.86+05
9210.030	22947–33802	1–2	3.69+05
2981.446	416–33947	3–2	1.40+07
3007.283	704–33947	2–2	7.39+06
3024.034	888–33947	1–2	1.19+07
3812.966	7728–33947	3–2	2.30+07
3850.819	7986–33947	2–2	5.42+06
3876.041	8155–33947	1–2	4.35+05
4674.660	12561–33947	3–2	1.84+04
4765.480	12969–33947	2–2	2.62+04
6163.540	17727–33947	2–2	3.28+04
6240.660	17927–33947	1–2	7.16+04
6421.360	18378–33947	2–2	9.33+05
6945.210	19552–33947	1–2	3.91+05
8999.560	22838–33947	2–2	4.23+06
9088.330	22947–33947	1–2	1.25+06
3000.949	704–34017	2–1	1.08+08
3017.629	888–34017	1–1	1.65+07

TABLE 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*—Continued

Wave length Å	Energy Levels K	J-values	A	Wave-length Å	Energy Levels K	J-values	A	Wave-length Å	Energy Levels K	J-values	A
3025.844	978–34017	0–1	6.54+07	3581.195	6928–34844	5–6	1.59+08	6230.730	20641–36686	4–4	2.24+06
3840.440	7986–34017	2–1	9.73+07	2835.457	0–35257	4–4	8.80+05	6322.690	20875–36686	3–4	2.18+05
3865.526	8155–34017	1–1	4.00+07	2869.308	416–35257	3–4	2.48+06	6677.990	21716–36686	5–4	2.00+06
4749.580	12969–34017	2–1	7.31+03	3528.942	6928–35257	5–4	1.11+04	6806.850	21999–36686	4–4	5.42+04
6137.000	17727–34017	2–1	2.46+05	3585.707	7377–35257	4–4	1.32+07	7748.280	23784–36686	5–4	1.23+06
6213.440	17927–34017	1–1	4.08+05	3631.465	7728–35257	3–4	9.33+07	2719.027	0–36767	4–3	1.82+08
6392.550	18378–34017	2–1	4.03+04	4294.130	11976–35257	4–4	8.40+06	2750.142	416–36767	3–3	5.25+07
7151.500	20038–34017	0–1	1.04+05	4404.750	12561–35257	3–4	6.79+07	3401.520	7377–36767	4–3	3.76+06
8943.000	22838–34017	2–1	2.98+05	6393.600	19621–35257	5–4	1.44+06	3442.671	7728–36767	3–3	1.53+06
9117.100	23052–34017	0–1	3.00+05	6462.730	19788–35257	4–4	1.77+05	3473.497	7986–36767	2–3	2.56+05
2936.905	0–34040	4–4	2.16+07	6839.830	20641–35257	4–4	3.80+04	4032.629	11976–36767	4–3	9.50+05
2973.237	416–34040	3–4	3.83+07	8713.190	23784–35257	5–4	1.15+05	4130.035	12561–36767	3–3	1.02+05
3687.459	6928–34040	5–4	1.85+07	8975.410	24119–35257	4–4	3.19+05	5202.340	17550–36767	3–3	2.27+06
3749.488	7377–34040	4–4	1.45+08	2825.689	0–35379	4–5	8.33+05	5250.650	17727–36767	2–3	1.04+06
3799.550	7728–34040	3–4	1.74+07	3513.820	6928–35379	5–5	1.55+07	5436.590	18378–36767	2–3	6.14+04
4531.150	11976–34040	4–4	9.72+05	3570.100	7377–35379	4–5	1.17+08	5871.040	19913–36941	2–2	1.02+05
4654.500	12561–34040	3–4	2.26+05	4271.760	11976–35379	4–5	5.27+07	5908.250	20020–36941	1–2	1.29+05
6062.890	17550–34040	3–4	1.27+04	6252.560	19390–35379	6–5	7.95+05	2720.904	416–37158	3–2	1.43+08
6933.630	19621–34040	5–4	2.39+04	6344.150	19621–35379	5–5	7.21+04	2742.406	704–37158	2–2	8.49+07
7461.530	20641–34040	4–4	3.50+04	8621.610	23784–35379	5–5	1.45+05	2756.330	888–37158	1–2	4.41+07
3008.140	888–34122	1–0	2.28+08	2807.246	0–35612	4–3	2.53+05	3396.977	7728–37158	3–2	2.59+06
3849.969	8155–34122	1–0	1.60+08	2840.423	416–35612	3–3	1.24+06	3446.947	8155–37158	1–2	3.31+05
6173.340	17927–34122	1–0	6.97+05	2863.864	704–35612	2–3	2.02+06	4064.450	12561–37158	3–2	3.69+05
6861.930	19552–34122	1–0	1.45+05	3540.711	7377–35612	4–3	1.82+06	5098.700	17550–37158	3–2	2.04+06
2912.159	0–34329	4–3	6.47+06	3585.321	7728–35612	3–3	2.88+07	5145.100	17727–37158	2–2	2.01+05
2947.877	416–34329	3–3	4.07+07	3618.769	7986–35612	2–3	1.39+08	5198.710	17927–37158	1–2	1.56+06
2973.134	704–34329	2–3	3.11+07	4229.760	11976–35612	4–3	1.19+05	2690.069	0–37163	4–3	1.23+06
3709.248	7377–34329	4–3	3.47+07	4337.050	12561–35612	3–3	3.59+06	2720.516	416–37163	3–3	2.51+05
3758.235	7728–34329	3–3	1.38+08	4415.120	12969–35612	2–3	3.62+07	2742.016	704–37163	2–3	1.52+06
3795.004	7986–34329	2–3	2.76+07	6318.020	19788–35612	4–3	6.57+05	3396.386	7728–37163	3–3	8.45+04
4592.660	12561–34329	3–3	5.56+05	8868.420	24339–35612	3–3	1.67+05	3969.260	11976–37163	4–3	5.78+07
4680.300	12969–34329	2–3	3.88+04	2795.006	0–35768	4–4	4.75+05	4063.596	12561–37163	3–3	1.59+08
7430.580	20875–34329	3–3	4.98+04	2827.893	416–35768	3–4	4.75+05	4132.060	12969–37163	2–3	3.52+07
2986.457	888–34363	1–1	1.50+06	3466.500	6928–35768	5–4	7.76+05	5322.050	18378–37163	2–3	3.60+05
2994.503	978–34363	0–1	1.46+08	3521.263	7377–35768	4–4	2.22+07	6137.700	20875–37163	3–3	2.84+06
3790.094	7986–34363	2–1	1.02+07	3565.381	7728–35768	3–4	7.51+07	6200.320	21039–37163	2–3	2.72+05
3814.525	8155–34363	1–1	2.59+06	4202.030	11976–35768	4–4	2.36+07	6592.920	21999–37163	4–3	1.74+06
4672.840	12969–34363	2–1	1.37+04	4307.900	12561–35768	3–4	8.34+07	6703.570	22249–37163	3–3	6.26+04
6082.710	17927–34363	1–1	7.22+04	6191.560	19621–35768	5–4	1.57+06	7664.300	24119–37163	4–3	1.41+06
6254.260	18378–34363	2–1	5.95+05	6256.370	19788–35768	4–4	1.77+05	2723.579	704–37410	2–1	1.14+08
6750.150	19552–34363	1–1	3.79+05	6609.120	20641–35768	4–4	8.90+04	2737.311	888–37410	1–1	1.30+08
6978.860	20038–34363	0–1	6.30+05	7261.020	21999–35768	4–4	2.68+04	2744.069	978–37410	0–1	6.61+07
8674.750	22838–34363	2–1	2.14+06	8582.270	24119–35768	4–4	2.41+05	3397.640	7986–37410	2–1	2.42+06
8757.190	22947–34363	1–1	1.92+06	2820.804	416–35856	3–2	2.48+05	3417.273	8155–37410	1–1	1.38+06
8838.430	23052–34363	0–1	1.53+06	2858.897	888–35856	1–2	9.61+05	4090.326	12969–37410	2–1	3.83+04
2929.008	416–34547	3–2	1.18+07	3554.120	7728–35856	3–2	3.34+06	5079.230	17727–37410	2–1	3.06+06
2953.941	704–34547	2–2	3.75+07	3586.986	7986–35856	2–2	4.53+07	5131.480	17927–37410	1–1	1.02+06
2970.106	888–34547	1–2	2.88+07	3608.861	8155–35856	1–2	1.82+08	2694.222	416–37521	3–2	1.80+05
3727.621	7728–34547	3–2	4.81+07	4291.470	12561–35856	3–2	7.41+05	2715.323	704–37521	2–2	3.61+05
3763.791	7986–34547	2–2	1.21+08	4367.910	12969–35856	2–2	4.41+05	2728.970	888–37521	1–2	5.66+05
3787.883	8155–34547	1–2	3.15+07	2803.168	416–36079	3–3	1.92+05	3355.517	7728–37521	3–2	8.58+04
4547.020	12561–34547	3–2	9.33+04	2825.995	704–36079	2–3	1.43+05	3384.765	7986–37521	2–2	7.35+04
4632.920	12969–34547	2–2	3.04+05	3483.009	7377–36079	4–3	8.42+05	4005.244	12561–37521	3–2	6.76+07
2969.361	888–34556	1–0	1.41+07	3526.168	7728–36079	3–3	1.27+07	4071.740	12969–37521	2–2	2.12+08
3786.678	8155–34556	1–0	1.17+07	3558.517	7986–36079	2–3	3.95+07	6005.530	20875–37521	3–2	7.21+04
6663.450	19552–34556	1–0	1.34+06	4147.672	11976–36079	4–3	1.75+06	6065.490	21039–37521	2–2	3.38+06
8611.810	22947–34556	1–0	4.40+06	4250.790	12561–36079	3–3	2.77+07	6546.240	22249–37521	3–2	2.06+06
2941.344	704–34692	2–1	1.26+07	4325.760	12969–36079	2–3	1.17+08	7583.800	24339–37521	3–2	1.33+06
2957.366	888–34692	1–1	4.32+07	6136.620	19788–36079	4–3	2.91+06	2618.711	0–38175	4–3	2.53+06
2965.256	978–34692	0–1	2.59+07	6475.630	20641–36079	4–3	1.34+05	2647.559	416–38175	3–3	2.59+06
3743.364	7986–34692	2–1	7.25+07	6575.020	20875–36079	3–3	1.27+05	2667.914	704–38175	2–3	8.45+05
3767.194	8155–34692	1–1	1.50+08	7228.690	22249–36079	3–3	5.51+04	3283.430	7728–38175	3–3	9.04+04
4602.000	12969–34692	2–1	3.32+05	8515.080	24339–36079	3–3	5.61+05	3311.451	7986–38175	2–3	2.62+04
2874.173	0–34782	4–5	2.07+06	2756.268	416–36686	3–4	8.90+06	3815.843	11976–38175	4–3	2.61+08
3589.106	6928–34782	5–5	2.59+06	3359.488	6928–36686	5–4	5.46+05	3902.948	12561–38175	3–3	6.40+07
3647.844	7377–34782	4–5	6.29+07	3410.905	7377–36686	4–4	4.61+05	3966.064	12969–38175	2–3	5.04+06
4383.550	11976–34782	4–5	1.02+08	3452.276	7728–36686	3–4	4.50+06	4889.010	17727–38175	2–3	2.00+05
6494.980	19390–34782	6–5	1.98+06	4045.815	11976–36686	4–4	2.07+08	5049.820	18378–38175	2–3	3.74+06
6593.880	19621–34782	5–5	1.30+05	4143.870	12561–36686	3–4	3.27+07	5701.550	20641–38175	4–3	1.17+06
9089.410	23784–34782	5–5	5.44+05	5916.250	19788–36686	4–4	1.68+05	6180.210	21999–38175	4–3	2.08+05

TABLE 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*—Continued

Wave length Å	Energy Levels K	J-values	A	Wave-length Å	Energy Levels K	J-values	A	Wave-length Å	Energy Levels K	J-values	A
6518.380	22838–38175	2–3	2.63+05	3075.721	7728–40231	3–2	9.98+07	2389.973	704–42533	2–3	2.30+07
7112.180	24119–38175	4–3	1.22+05	3100.305	7986–40231	2–2	7.99+07	2843.631	7377–42533	4–3	3.40+07
7223.670	24336–38175	2–3	5.27+05	3116.634	8155–40231	1–2	2.08+07	2872.335	7728–42533	3–3	1.59+07
8365.640	26225–38175	3–3	4.72+05	3612.940	12561–40231	3–2	2.45+06	2893.763	7986–42533	2–3	1.72+06
2612.773	416–38678	3–2	3.10+06	3666.944	12969–40231	2–2	5.58+05	3271.684	11976–42533	4–3	2.04+06
2632.595	704–38678	2–2	3.84+06	4407.710	17550–40231	3–2	4.64+06	3335.513	12561–42533	3–3	3.26+05
2645.423	888–38678	1–2	1.70+06	4442.340	17727–40231	2–2	2.14+07	4001.663	17550–42533	3–3	4.84+06
3827.826	12561–38678	3–2	3.23+08	4482.260	17927–40231	1–2	1.96+07	4030.186	17727–42533	2–3	1.86+06
3888.516	12969–38678	2–2	7.51+07	4574.720	18378–40231	2–2	5.55+05	4138.840	18378–42533	2–3	9.23+04
4771.700	17727–38678	2–2	1.65+05	4834.510	19552–40231	1–2	1.19+05	2788.106	6928–42784	5–6	1.78+08
4817.770	17927–38678	1–2	1.17+05	2483.272	0–40257	4–5	3.04+08	4260.480	19351–42816	5–5	1.43+08
4924.780	18378–38678	2–2	7.25+05	2999.512	6928–40257	5–5	5.87+07	4299.240	19562–42816	4–5	4.97+07
5615.300	20875–38678	3–2	1.31+06	3040.428	7377–40257	4–5	1.54+07	4957.600	22650–42816	6–5	5.92+07
6085.270	22249–38678	3–2	1.34+05	2518.103	704–40405	2–1	2.92+08	5006.130	22846–42816	5–5	1.13+07
6311.510	22838–38678	2–2	1.93+05	2529.837	888–40405	1–1	8.93+07	5044.220	22997–42816	4–5	5.85+05
6355.040	22947–38678	1–2	5.74+05	2535.609	978–40405	0–1	2.23+08	5232.950	23711–42816	4–5	5.44+07
7189.170	24772–38678	1–2	4.00+05	3083.743	7986–40405	2–1	1.41+08	6271.290	26875–42816	5–5	1.54+05
8293.530	26624–38678	2–2	5.59+05	3099.897	8155–40405	1–1	2.11+08	2355.327	416–42860	3–2	1.12+07
2610.750	704–38996	2–1	3.04+06	4408.420	17727–40405	2–1	1.28+07	2371.431	704–42860	2–2	2.54+07
2623.367	888–38996	1–1	4.67+06	4447.720	17927–40405	1–1	2.96+07	2381.836	888–42860	1–2	3.10+07
2629.579	978–38996	0–1	2.61+06	4538.760	18378–40405	2–1	1.67+05	2845.596	7728–42860	3–2	3.29+07
3223.844	7986–38996	2–1	1.38+07	4794.360	19552–40405	1–1	1.09+05	2866.626	7986–42860	2–2	1.52+07
3241.502	8155–38996	1–1	1.16+05	2473.156	0–40422	4–4	1.27+07	2880.581	8155–42860	1–2	1.85+06
3841.050	12969–38996	2–1	4.45+08	2984.785	6928–40422	5–4	1.48+07	3299.509	12561–42860	3–2	3.37+05
4745.130	17927–38996	1–1	9.65+04	3025.283	7377–40422	4–4	1.69+06	3949.956	17550–42860	3–2	3.03+07
4848.880	18378–38996	2–1	1.53+05	3057.802	7728–40422	3–4	9.53+05	3977.744	17727–42860	2–2	4.42+07
5141.750	19552–38996	1–1	2.26+06	2524.294	888–40491	1–0	6.60+08	4009.715	17927–42860	1–2	3.08+07
5273.380	20038–38996	0–1	3.49+06	3091.579	8155–40491	1–0	2.78+08	4083.554	18378–42860	2–2	2.10+06
5567.400	21039–38996	2–1	7.51+05	4430.620	17927–40491	1–0	3.24+07	2778.221	6928–42912	5–5	3.59+07
6229.230	22947–38996	1–1	4.45+05	2462.648	0–40594	4–4	6.72+07	2813.288	7377–42912	4–5	1.30+08
6270.240	23052–38996	0–1	6.96+05	2488.144	416–40594	3–4	3.87+08	3231.576	11976–42912	4–5	1.56+06
7190.130	25092–38996	0–1	3.42+05	2969.476	6928–40594	5–4	1.57+07	4488.920	20641–42912	4–5	3.38+05
7941.090	26406–38996	1–1	7.20+05	3009.571	7377–40594	4–4	5.79+07	2772.075	6928–42992	5–5	3.78+07
8080.670	26624–38996	2–1	5.27+05	3041.740	7728–40594	3–4	2.36+07	2806.985	7377–42992	4–5	4.75+07
2522.850	0–39626	4–4	3.68+08	3493.290	11976–40594	4–4	1.75+06	3223.273	11976–42992	4–5	7.52+05
2549.614	416–39626	3–4	5.98+07	4338.260	17550–40594	3–4	3.20+05	4277.680	19621–42992	5–5	7.42+04
3057.447	6928–39626	5–4	1.09+08	2447.711	0–40842	4–3	1.39+07	5920.520	26106–42992	6–5	2.81+05
3099.970	7377–39626	4–4	4.14+07	2472.896	416–40842	3–3	1.71+08	2769.672	6928–43023	5–4	3.94+06
3134.112	7728–39626	3–4	5.72+06	2490.645	704–40842	2–3	3.68+08	2804.521	7377–43023	4–4	4.51+07
3615.665	11976–39626	4–4	8.19+05	2987.292	7377–40842	4–3	2.94+07	2832.436	7728–43023	3–4	9.24+07
4528.620	17550–39626	3–4	2.28+07	3018.985	7728–40842	3–3	5.24+07	3281.824	12561–43023	3–4	2.87+05
2501.133	0–39970	4–3	1.33+08	3042.667	7986–40842	2–3	3.41+07	4513.710	20875–43023	3–4	9.35+04
2527.436	416–39970	3–3	2.53+08	3463.304	11976–40842	4–3	1.74+06	2369.457	888–43079	1–1	1.73+07
2545.980	704–39970	2–3	1.22+08	3534.914	12561–40842	3–3	1.59+06	2374.519	978–43079	0–1	3.43+07
3067.246	7377–39970	4–3	1.01+08	4292.140	17550–40842	3–3	2.31+05	2848.715	7986–43079	2–1	1.81+07
3100.667	7728–39970	3–3	6.25+07	2487.370	704–40895	2–2	1.08+07	2862.495	8155–43079	1–1	1.24+07
3125.653	7986–39970	2–3	1.69+07	3014.175	7728–40895	3–2	3.00+06	3943.341	17727–43079	2–1	6.24+06
3571.226	11976–39970	4–3	2.71+06	3037.781	7986–40895	2–2	3.02+06	3974.764	17927–43079	1–1	1.77+06
3647.427	12561–39970	3–3	6.84+06	3053.440	8155–40895	1–2	3.06+06	4047.315	18378–43079	2–1	2.15+06
3702.500	12969–39970	2–3	1.63+06	3528.316	12561–40895	3–2	6.03+05	2341.575	416–43109	3–4	5.14+06
4459.120	17550–39970	3–3	1.52+07	4282.410	17550–40895	3–2	5.03+07	2797.776	7377–43109	4–4	2.67+07
4494.570	17727–39970	2–3	2.11+07	4315.090	17727–40895	2–2	3.35+07	2825.557	7728–43109	3–4	5.47+07
4630.120	18378–39970	2–3	6.57+05	4352.740	17927–40895	1–2	1.94+07	3272.596	12561–43109	3–4	7.25+05
5235.390	20875–39970	3–3	1.15+06	4439.880	18378–40895	2–2	6.77+05	4256.320	19621–43109	5–4	1.21+05
2552.604	888–40052	1–2	4.58+06	2462.182	416–41018	3–2	4.19+07	2795.541	7377–43138	4–3	8.44+06
3092.778	7728–40052	3–2	1.76+06	2479.777	704–41018	2–2	2.55+08	2823.277	7728–43138	3–3	7.20+07
3117.640	7986–40052	2–2	9.07+05	2491.156	888–41018	1–2	3.57+08	2843.978	7986–43138	2–3	1.23+08
4442.840	17550–40052	3–2	8.71+05	3003.032	7728–41018	3–2	4.27+07	3313.723	12969–43138	2–3	2.50+05
4478.040	17727–40052	2–2	1.36+05	3026.464	7986–41018	2–2	5.17+07	4198.310	19351–43163	5–4	4.94+07
4518.590	17927–40052	1–2	8.23+04	3042.022	8155–41018	1–2	2.45+07	4235.940	19562–43163	4–4	8.43+07
2486.372	0–40207	4–3	1.54+07	3513.065	12561–41018	3–2	4.21+06	4271.160	19757–43163	3–4	7.22+07
2512.361	416–40207	3–3	1.09+07	3564.110	12969–41018	2–2	2.30+06	4920.510	22846–43163	5–4	6.11+07
2530.694	704–40207	2–3	7.46+06	4292.290	17727–41018	2–2	7.94+05	4957.300	22997–43163	4–4	2.45+07
3045.077	7377–40207	4–3	6.48+06	2484.186	888–41131	1–1	4.04+08	4985.550	23111–43163	3–4	2.78+06
3078.014	7728–40207	3–3	4.10+06	2489.751	978–41131	0–1	6.23+08	5139.470	23711–43163	4–4	2.50+07
3102.644	7986–40207	2–3	7.86+05	3016.186	7986–41131	2–1	5.11+07	5266.560	24181–43163	3–4	3.29+07
4447.130	17727–40207	2–3	6.21+05	3031.638	8155–41131	1–1	8.39+07	5791.040	25900–43163	4–4	9.43+05
2510.836	416–40231	3–2	2.32+08	3549.868	12969–41131	2–1	7.02+06	7086.760	29056–43163	3–4	3.97+05
2529.136	704–40231	2–2	1.73+08	2350.408	0–42533	4–3	3.52+06	2817.505	7728–43210	3–2	1.27+07
2540.973	888–40231	1–2	1.57+08	2373.625	416–42533	3–3	3.96+07	2838.120	7986–43210	2–2	6.01+07

TABLE 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*—Continued

Wave length Å	Energy Levels K	J-values	A	Wave-length Å	Energy Levels K	J-values	A	Wave-length Å	Energy Levels K	J-values	A
2851.798	8155−43210	1−2	1.57+08	2761.781	7986−44184	2−2	1.10+08	3803.220	18378−44664	2−2	2.21+05
2746.982	6928−43321	5−6	9.17+07	2774.730	8155−44184	1−2	1.99+07	3981.104	19552−44664	1−2	7.33+05
2808.328	7728−43326	3−3	4.49+06	3753.613	17550−44184	3−2	8.06+07	4603.350	22947−44664	1−2	3.79+05
2828.809	7986−43326	2−3	1.46+07	3778.699	17727−44184	2−2	5.63+06	3980.650	19562−44677	4−4	2.14+05
3249.504	12561−43326	3−3	2.73+05	3807.539	17927−44184	1−2	4.30+07	4011.710	19757−44677	3−4	6.66+05
3293.142	12969−43326	2−3	7.65+05	4058.756	19552−44184	1−2	4.99+06	4579.340	22846−44677	5−4	2.39+05
4247.320	19788−43326	4−3	6.80+05	4288.970	20875−44184	3−2	1.32+06	4635.630	23111−44677	3−4	1.12+05
4187.800	19562−43435	4−3	7.33+07	4319.460	21039−44184	2−2	2.21+05	4768.400	23711−44677	4−4	8.77+05
4222.220	19757−43435	3−3	2.39+07	4683.560	22838−44184	2−2	1.71+06	4877.590	24181−44677	3−4	1.88+05
4250.120	19913−43435	2−3	9.38+07	4707.490	22947−44184	1−2	3.02+06	5324.190	25900−44677	4−4	7.72+07
4891.500	22997−43435	4−3	5.89+07	2259.511	0−44244	4−5	4.73+07	5393.170	26140−44677	3−4	2.02+07
4919.000	23111−43435	3−3	4.12+07	2679.063	6928−44244	5−5	6.12+07	5615.650	26875−44677	5−4	7.60+07
4938.820	23193−43435	2−3	9.37+06	2711.656	7377−44244	4−5	2.99+07	5709.390	27167−44677	4−4	9.92+06
5068.770	23711−43435	4−3	9.53+06	4022.450	19390−44244	6−5	2.01+05	5784.690	27395−44677	3−4	5.31+05
5192.350	24181−43435	3−3	5.35+07	2303.582	888−44285	1−2	5.25+07	6400.010	29056−44677	3−4	3.45+07
5281.800	24507−43435	2−3	1.92+07	2734.616	7728−44285	3−2	8.15+06	9103.640	33695−44677	5−4	1.45+06
5780.620	26140−43435	3−3	7.16+05	2754.033	7986−44285	2−2	4.12+07	2269.099	704−44761	2−1	7.17+07
2298.170	0−43500	4−4	9.71+07	2766.910	8155−44285	1−2	2.00+07	2283.304	978−44761	0−1	4.36+07
2320.358	416−43500	3−4	6.74+07	3739.317	17550−44285	3−2	3.63+06	2718.436	7986−44761	2−1	1.58+08
2733.582	6928−43500	5−4	2.61+08	3792.833	17927−44285	1−2	3.14+06	2730.982	8155−44761	1−1	4.51+07
2767.523	7377−43500	4−4	3.94+07	4685.040	22947−44285	1−2	3.19+05	4582.940	22947−44761	1−1	2.26+05
2794.703	7728−43500	3−4	5.59+06	5535.420	26225−44285	3−2	3.62+06	2275.189	888−44827	1−0	1.07+08
3171.353	11976−43500	4−4	1.02+07	2298.657	888−44378	1−1	2.11+07	2726.054	8155−44827	1−0	4.10+08
3852.575	17550−43500	3−4	1.34+07	2303.422	978−44378	0−1	7.12+07	3920.645	19562−45061	4−3	8.76+05
4373.560	20641−43500	4−4	1.41+06	2759.814	8155−44378	1−1	4.32+07	3975.210	19913−45061	2−3	7.25+05
4187.040	19757−43634	3−2	1.13+08	4687.680	23052−44378	0−1	1.93+05	4554.460	23111−45061	3−3	4.59+05
4233.610	20020−43634	1−2	9.16+07	2287.250	704−44411	2−1	2.34+08	4571.450	23193−45061	2−3	2.34+05
4871.320	23111−43634	3−2	7.24+07	2296.928	888−44411	1−1	4.21+07	4682.580	23711−45061	4−3	3.78+05
4890.760	23193−43634	2−2	4.53+07	2301.685	978−44411	0−1	6.35+07	4787.840	24181−45061	3−3	6.90+05
4903.320	23245−43634	1−2	1.39+07	2744.529	7986−44411	2−1	1.12+08	5217.400	25900−45061	4−3	1.49+07
5139.260	24181−43634	3−2	3.26+07	2757.317	8155−44411	1−1	1.47+08	5283.630	26140−45061	3−3	5.41+07
5226.870	24507−43634	2−2	4.77+07	3179.479	12969−44411	2−1	1.59+07	5339.940	26340−45061	2−3	2.59+07
5780.830	26340−43634	2−2	6.33+05	3746.486	17727−44411	2−1	1.10+07	5586.760	27167−45061	4−3	6.68+07
4191.440	19913−43764	2−1	1.45+08	3774.827	17927−44411	1−1	2.97+07	5658.830	27395−45061	3−3	2.11+07
4210.350	20020−43764	1−1	8.10+07	4101.681	20038−44411	0−1	2.83+06	5712.140	27560−45061	2−3	2.54+06
4859.750	23193−43764	2−1	4.40+07	4277.390	21039−44411	2−1	7.32+05	6246.330	29056−45061	3−3	1.20+07
4872.140	23245−43764	1−1	8.35+07	4634.170	22838−44411	2−1	1.36+05	6411.660	29469−45061	2−3	2.27+07
4878.220	23270−43764	0−1	2.69+07	4657.600	22947−44411	1−1	1.26+06	9070.420	34040−45061	4−3	2.01+06
5191.460	24507−43764	2−1	9.05+07	4680.480	23052−44411	0−1	1.19+06	2641.647	7377−45221	4−3	3.20+07
2276.026	0−43923	4−3	9.01+07	2250.791	0−44415	4−4	2.37+07	2666.400	7728−45221	3−3	1.54+07
2297.788	416−43923	3−3	1.01+08	2272.070	416−44415	3−4	3.44+07	2684.857	7986−45221	2−3	1.42+06
2313.105	704−43923	2−3	8.52+07	2666.813	6928−44415	5−4	4.65+07	3007.147	11976−45221	4−3	4.71+07
2735.476	7377−43923	4−3	1.84+08	2699.108	7377−44415	4−4	3.29+07	3060.985	12561−45221	3−3	9.06+06
2762.028	7728−43923	3−3	8.84+07	2724.954	7728−44415	3−4	4.16+07	3636.186	17727−45221	2−3	2.44+07
2781.837	7986−43923	2−3	1.86+07	3081.832	11976−44415	4−4	1.18+06	3724.380	18378−45221	2−3	1.14+08
3790.756	17550−43923	3−3	5.03+06	2294.406	888−44459	1−0	3.33+08	4067.274	20641−45221	4−3	1.74+07
3816.342	17727−43923	2−3	1.93+07	2753.687	8155−44459	1−0	2.26+08	4106.265	20875−45221	3−3	2.05+06
3913.634	18378−43923	2−3	8.99+06	3768.030	17927−44459	1−0	5.52+07	4466.550	22838−45221	2−3	7.23+07
4741.530	22838−43923	2−3	2.87+06	2267.085	416−44512	3−2	5.81+07	4786.810	24336−45221	2−3	6.90+06
2270.863	0−44023	4−4	9.28+06	2717.787	7728−44512	3−2	1.50+07	8096.870	32874−45221	4−3	1.52+06
2292.525	416−44023	3−4	2.75+07	2736.960	7986−44512	2−2	8.52+07	2662.057	7728−45282	3−2	3.59+07
2695.036	6928−44023	5−4	4.56+06	2749.688	8155−44512	1−2	8.25+06	2680.454	7986−45282	2−2	2.88+07
2728.021	7377−44023	4−4	1.99+07	3128.901	12561−44512	3−2	4.62+06	2692.658	8155−45282	1−2	2.37+06
2754.427	7728−44023	3−4	9.33+06	3707.922	17550−44512	3−2	5.09+08	3055.264	12561−45282	3−2	8.04+07
3776.455	17550−44023	3−4	9.03+06	3732.399	17727−44512	2−2	2.00+08	3628.094	17727−45282	2−2	7.87+06
4275.720	20641−44023	4−4	2.13+05	3760.533	17927−44512	1−2	3.20+07	3654.660	17927−45282	1−2	3.31+06
4591.500	22249−44023	3−4	1.76+05	4635.850	22947−44512	1−2	2.15+06	3715.914	18378−45282	2−2	3.35+07
2300.140	704−44166	2−3	4.74+07	2265.055	416−44551	3−3	3.01+07	3885.512	19552−45282	1−2	3.68+07
2717.368	7377−44166	4−3	2.57+06	2279.922	704−44551	2−3	7.13+07	4095.973	20875−45282	3−2	1.66+07
2743.564	7728−44166	3−3	2.71+07	2689.213	7377−44551	4−3	7.58+07	4123.748	21039−45282	2−2	8.03+06
2763.108	7986−44166	2−3	2.49+07	2714.870	7728−44551	3−3	8.16+06	4340.490	22249−45282	3−2	4.37+05
3756.069	17550−44166	3−3	5.36+06	2734.006	7986−44551	2−3	1.97+07	4454.380	22838−45282	2−2	2.08+07
3781.188	17727−44166	2−3	2.65+06	4604.250	22838−44551	2−3	7.63+04	4476.020	22947−45282	1−2	9.19+07
3876.670	18378−44166	2−3	4.70+05	2283.656	888−44664	1−2	2.74+07	4772.820	24336−45282	2−2	5.22+06
4561.430	22249−44166	3−3	2.14+05	2706.583	7728−44664	3−2	1.51+08	4874.360	24772−45282	1−2	3.46+05
4687.390	22838−44166	2−3	7.54+05	2725.602	7986−44664	2−2	4.31+06	2605.658	6928−45295	5−5	1.23+07
2284.086	416−44184	3−2	1.12+08	2738.214	8155−44664	1−2	5.37+06	2636.479	7377−45295	4−5	6.62+06
2299.221	704−44184	2−2	6.95+07	3114.054	12561−44664	3−2	3.88+05	3000.453	11976−45295	4−5	3.22+07
2309.000	888−44184	1−2	8.10+07	3687.098	17550−44664	3−2	1.74+07	3859.214	19390−45295	6−5	4.67+07
2742.255	7728−44184	3−2	7.40+07	3739.120	17927−44664	1−2	3.98+06	3893.914	19621−45295	5−5	4.81+06

TABLE 2. — *Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level* — Continued

Wave length Å	Energy Levels K	*J*-values	A	Wave-length Å	Energy Levels K	*J*-values	A	Wave-length Å	Energy Levels K	*J*-values	A
4055.038	20641–45295	4–5	6.26+06	2606.828	7377–45726	4–5	1.12+08	3998.055	21716–46721	5–4	4.06+07
4239.850	21716–45295	5–5	5.11+06	2962.110	11976–45726	4–5	6.60+05	4043.901	21999–46721	4–4	1.09+07
4647.440	21716–45295	5–5	9.51+06	3796.000	19390–45726	6–5	2.84+05	4358.500	23784–46721	5–4	5.29+06
4721.000	24119–45295	4–5	5.55+05	3985.322	20641–45726	4–5	5.39+05	4423.140	24119–46721	4–4	1.00+06
3908.691	19757–45334	3–2	2.96+06	2569.595	6928–45833	5–4	9.12+06	4514.190	24575–46721	4–4	2.01+06
4515.180	23193–45334	2–2	3.77+05	2599.565	7377–45833	4–4	1.38+08	5584.770	28820–46721	5–4	1.54+06
4525.870	23245–45334	1–2	5.42+05	2623.532	7728–45833	3–4	1.08+08	5762.430	29372–46721	3–4	1.38+06
4726.160	24181–45334	3–2	5.70+05	3004.620	12561–45833	3–4	1.11+06	7219.690	32874–46721	4–4	2.48+06
4800.140	24507–45334	2–2	2.65+05	4145.206	21716–45833	5–4	8.41+05	2580.454	7986–46727	2–2	3.50+06
5208.600	26140–45334	3–2	3.25+07	4533.950	23784–45833	5–4	1.98+05	3426.383	17550–46727	3–2	1.37+08
5263.310	26340–45334	2–2	3.11+07	4603.960	24119–45833	4–4	2.42+05	3447.280	17727–46727	2–2	1.15+08
5302.310	26479–45334	1–2	4.33+07	2594.150	7377–45914	4–3	1.70+07	3471.267	17927–46727	1–2	6.25+07
5572.850	27395–45334	3–2	8.18+07	2618.019	7728–45914	3–3	8.38+07	3526.470	18378–46727	2–2	1.87+08
5624.550	27560–45334	2–2	2.79+07	2635.810	7986–45914	2–3	1.17+08	3678.862	19552–46727	1–2	5.08+07
5658.540	27666–45334	1–2	4.57+06	3034.510	12969–45914	2–3	5.19+06	4184.890	22838–46727	2–2	6.66+07
6141.730	29056–45334	3–2	3.88+06	4019.050	21039–45914	2–3	1.05+06	4203.990	22947–46727	1–2	4.57+07
6301.520	29469–45334	2–2	2.02+07	4180.400	21999–45914	4–3	8.64+05	4464.770	24336–46727	2–2	2.74+06
6408.030	29733–45334	1–2	1.29+07	4633.760	24339–45914	3–3	3.87+05	5760.350	29372–46727	3–2	2.22+06
2627.230	7377–45428	4–4	2.19+06	2614.495	7728–45965	3–2	1.62+07	2157.795	416–46745	3–3	1.60+09
2651.708	7728–45428	3–4	8.00+06	2632.238	7986–45965	2–2	9.22+07	2171.298	704–46745	2–3	3.53+08
2988.473	11976–45428	4–4	3.30+06	2643.999	8155–45965	1–2	1.55+08	2539.358	7377–46745	4–3	2.46+07
3041.639	12561–45428	3–4	3.75+07	4215.430	22249–45965	3–2	7.01+06	2579.266	7986–46745	2–3	6.89+06
3873.762	19621–45428	5–4	4.11+07	3760.052	19390–45978	6–7	4.44+07	2875.303	11976–46745	4–3	1.97+07
3899.037	19788–45428	4–4	5.35+06	2556.862	6928–46027	5–6	7.27+06	3424.286	17550–46745	3–3	2.10+08
4033.190	20641–45428	4–4	9.30+05	3753.154	19390–46027	6–6	1.17+06	3445.151	17727–46745	2–3	2.93+08
4071.520	20875–45428	3–4	5.89+06	3785.950	19621–46027	5–6	2.63+07	3524.242	18378–46745	2–3	6.87+07
4215.970	21716–45428	5–4	1.00+06	3770.405	19621–46136	5–5	1.65+06	3829.764	20641–46745	4–3	3.35+06
4266.970	21999–45428	4–4	5.49+06	3794.340	19788–46136	4–5	2.70+07	3864.307	20875–46745	3–3	6.56+05
4618.760	23784–45428	5–4	1.82+06	3921.270	20641–46136	4–5	6.66+05	4039.940	21999–46745	4–3	1.44+06
4691.410	24119–45428	4–4	8.66+06	2166.769	0–46137	4–3	2.78+09	4181.760	22838–46745	2–3	1.54+08
4740.340	24339–45428	3–4	6.73+05	2186.483	416–46137	3–3	7.03+08	4418.430	24119–46745	4–3	5.76+05
4793.950	24575–45428	4–4	9.09+04	3497.110	17550–46137	3–3	1.15+08	4461.200	24336–46745	2–3	2.83+06
3922.100	20020–45509	1–1	7.24+05	4290.870	22838–46137	2–3	3.10+06	4871.940	26225–46745	3–3	1.37+06
5215.180	26340–45509	2–1	5.53+07	2178.080	416–46314	3–2	1.73+09	5754.410	29372–46745	3–3	1.26+06
5253.500	26479–45509	1–1	1.28+07	2191.836	704–46314	2–2	8.35+08	7498.560	33413–46745	3–3	1.26+06
5273.180	26550–45509	0–1	4.29+07	2200.723	888–46314	1–2	5.47+08	2164.550	704–46889	2–2	1.02+09
5569.620	27560–45509	2–1	8.42+07	3475.651	17550–46314	3–2	1.35+08	2552.832	7728–46889	3–2	1.53+07
5602.960	27666–45509	1–1	3.98+07	3521.833	17927–46314	1–2	3.63+07	2569.742	7986–46889	2–2	1.78+07
6232.660	29469–45509	2–1	1.09+07	4258.620	22838–46314	2–2	4.03+06	2580.939	8155–46889	1–2	4.32+06
6336.840	29733–45509	1–1	2.91+07	2187.195	704–46410	2–1	1.65+09	3428.195	17727–46889	2–2	2.23+08
2661.196	7986–45552	2–1	5.71+06	2196.043	888–46410	1–1	1.24+09	3451.917	17927–46889	1–2	1.56+08
2673.214	8155–45552	1–1	2.15+07	2200.370	978–46410	0–1	9.79+08	3506.500	18378–46889	2–2	1.07+08
3068.175	12969–45552	2–1	1.16+08	3485.342	17727–46410	2–1	1.59+08	3657.139	19552–46889	1–2	2.25+07
3592.881	17727–45552	2–1	5.97+06	3566.316	18378–46410	2–1	2.25+07	3842.975	20875–46889	3–2	4.46+06
3678.980	18378–45552	2–1	1.37+07	4241.110	22838–46410	2–1	2.76+06	4156.800	22838–46889	2–2	1.03+08
3845.171	19552–45552	1–1	4.14+07	4279.860	23052–46410	0–1	2.71+06	4175.640	22947–46889	1–2	9.50+07
3918.317	20038–45552	0–1	3.99+07	4620.140	24772–46410	1–1	3.60+05	4520.240	24772–46889	1–2	9.09+05
4078.356	21039–45552	2–1	3.21+07	2178.120	704–46601	2–1	1.29+09	4838.090	26225–46889	3–2	1.66+05
4401.450	22838–45552	2–1	7.76+06	2186.893	888–46601	1–1	4.34+08	7418.670	33413–46889	3–2	6.89+06
4422.570	22947–45552	1–1	6.85+07	3462.354	17727–46601	2–1	1.82+07	2501.695	6928–46889	5–4	2.93+07
4443.200	23052–45552	0–1	6.79+07	3486.556	17927–4660'	1–1	1.36+07	2863.431	11976–46889	4–4	3.63+07
4712.100	24336–45552	2–1	8.72+05	3542.243	18378–46601	2–1	8.11+07	3407.461	17550–46889	3–4	4.56+08
4811.040	24772–45552	1–1	4.39+05	3696.030	19552–46601	1–1	1.42+06	3666.240	19621–46889	5–4	1.04+07
2660.396	7986–45563	2–3	6.75+06	4207.130	22838–46601	2–1	2.51+07	3808.731	20641–46889	4–4	2.58+07
2976.550	11976–45563	4–3	1.96+06	4226.430	22947–46601	1–1	2.49+07	3842.901	20875–46889	3–4	2.48+06
3029.235	12561–45563	3–3	7.88+06	4245.260	23052–46601	0–1	4.38+07	3971.325	21716–46889	5–4	3.36+07
3677.477	18378–45563	2–3	1.04+07	4490.090	24336–46601	2–1	1.96+07	4057.346	22249–46889	3–4	4.05+06
3878.676	19788–45563	4–3	2.25+06	4579.820	24772–46601	1–1	9.91+05	4326.760	23784–46889	5–4	5.77+05
4011.412	20641–45563	4–3	2.05+06	2595.422	8155–46673	1–0	9.71+06	4390.460	24119–46889	4–4	9.97+05
4049.331	20875–45563	3–3	2.60+06	3477.856	17927–46673	1–0	8.18+07	4480.140	24575–46889	4–4	3.56+06
4076.498	21039–45563	2–3	5.48+06	3686.260	19552–46673	1–0	1.52+08	5532.740	28820–46889	5–4	1.09+06
4242.590	21999–45563	4–3	6.98+05	4213.650	22947–46673	1–0	1.04+08	5707.060	29372–46889	3–4	1.74+06
4288.150	22249–45563	3–3	4.12+06	4564.830	24772–46673	1–0	4.75+06	7132.990	32874–46889	4–4	3.45+06
4661.980	24119–45563	4–3	1.56+06	2512.266	6928–46721	5–4	2.41+07	2568.862	7986–46902	2–1	2.52+07
4710.290	24339–45563	3–3	7.82+06	2563.820	7728–46721	3–4	1.79+06	2580.066	8155–46902	1–1	9.08+06
5229.860	26479–45595	1–0	1.57+08	2877.302	11976–46721	4–4	4.21+07	2946.095	12969–46902	2–1	1.42+06
5576.100	27666–45595	1–0	1.05+08	3427.121	17550–46721	3–4	4.59+08	3426.637	17727–46902	2–1	2.52+08
6302.510	29733–45595	1–0	4.12+07	3689.010	19621–46721	5–4	1.02+06	3450.330	17927–46902	1–1	2.54+08
2584.537	6928–45608	5–6	1.11+08	3833.310	20641–46721	4–4	3.50+07	3504.864	18378–46902	2–1	4.19+07
2576.692	6928–45726	5–5	5.50+07	3867.925	20875–46721	3–4	4.04+06	3721.396	20038–46902	0–1	3.98+07

TABLE 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*—Continued

Wave length Å	Energy Levels K	*J*-values	A	Wave-length Å	Energy Levels K	*J*-values	A	Wave-length Å	Energy Levels K	*J*-values	A
4154.500	22838–46902	2–1	1.80+08	2893.882	12561–47107	3–4	7.66+06	7401.690	33765–47272	2–1	9.08+06
4173.320	22947–46902	1–1	1.66+07	3382.404	17550–47107	3–4	1.14+07	2472.343	6928–47363	5–6	9.03+07
4191.680	23052–46902	0–1	3.21+07	3637.251	19621–47107	5–4	1.01+07	3573.836	19390–47363	6–6	2.92+07
4430.200	24336–46902	2–1	9.08+06	3659.519	19788–47107	4–4	7.59+07	3603.572	19621–47363	5–6	1.65+06
4517.530	24772–46902	1–1	8.34+06	3777.452	20641–47107	4–4	7.99+06	3897.896	21716–47363	5–6	4.27+07
4583.720	25092–46902	0–1	1.17+06	3937.331	21716–47107	5–4	1.17+07	4239.740	23784–47363	5–6	5.85+06
2495.869	6928–46982	5–6	2.30+07	3981.774	21999–47107	4–4	2.38+07	4654.630	25900–47378	4–4	1.68+07
3623.188	19390–46982	6–6	6.72+07	4021.870	22249–47107	3–4	6.00+07	4707.280	26140–47378	3–4	1.98+07
3653.763	19621–46982	5–6	6.46+06	4286.440	23784–47107	5–4	7.46+05	4875.900	26875–47378	5–4	1.28+06
3956.680	21716–46982	5–6	7.96+07	4348.940	24119–47107	4–4	1.62+06	4946.390	27167–47378	4–4	5.53+06
4309.380	23784–46982	5–6	1.34+07	4390.950	24339–47107	3–4	9.16+06	5002.800	27395–47378	3–4	2.77+06
4788.760	26106–46982	6–6	2.60+06	4436.920	24575–47107	4–4	1.60+06	6220.770	31307–47378	4–4	6.67+05
4845.660	26351–46982	5–6	4.12+05	4881.730	26628–47107	4–4	1.74+06	6226.760	31323–47378	3–4	1.16+06
4137.980	22846–47006	5–5	1.46+05	7024.080	32874–47107	4–4	1.27+06	6419.680	31805–47378	3–4	7.53+05
4736.780	25900–47006	4–5	2.55+07	2564.561	8155–47136	1–2	1.27+07	6999.900	33096–47378	4–4	4.18+06
4966.100	26875–47006	5–5	1.22+07	2891.410	12561–47136	3–2	1.62+06	7207.410	33507–47378	3–4	4.04+07
5039.260	27167–47006	4–5	3.05+06	2925.901	12969–47136	2–2	2.24+07	7306.610	33695–47378	5–4	2.72+06
7187.340	33096–47006	4–5	4.42+07	3379.021	17550–47136	3–2	7.68+07	7495.090	34040–47378	4–4	5.40+07
7511.040	33695–47006	5–5	6.56+07	3399.336	17727–47136	2–2	4.07+08	7661.220	34329–47378	3–4	8.00+06
7710.390	34040–47006	4–5	4.72+06	3422.658	17927–47136	1–2	2.11+08	7937.170	34782–47378	5–4	5.04+07
8220.410	34844–47006	6–5	7.74+07	3476.336	18378–47136	2–2	2.14+07	8248.150	35257–47378	4–4	6.29+06
8598.790	35379–47006	5–5	2.81+06	3624.310	19552–47136	1–2	1.80+07	8331.940	35379–47378	5–4	2.76+07
2494.252	6928–47008	5–5	8.40+06	4017.093	22249–47136	3–2	6.68+06	9350.460	36686–47378	4–4	8.71+06
2522.488	7377–47008	4–5	1.68+07	4114.448	22838–47136	2–2	2.91+07	2867.880	12561–47420	3–2	3.11+06
2853.685	11976–47008	4–5	2.33+06	4132.902	22947–47136	1–2	6.31+07	3346.936	17550–47420	3–2	7.05+06
3619.772	19390–47008	6–5	4.58+06	4384.680	24336–47136	2–2	6.01+06	3366.867	17727–47420	2–2	4.71+07
3650.281	19621–47008	5–5	7.65+07	4385.260	24339–47136	3–2	2.94+06	3389.748	17927–47420	1–2	1.77+07
3672.722	19788–47008	4–5	5.23+06	4780.820	26624–47136	2–2	3.58+05	3442.364	18378–47420	2–2	7.48+07
3791.504	20641–47008	4–5	3.99+06	4873.750	26624–47136	2–2	4.34+05	3587.424	19552–47420	1–2	5.35+07
3952.604	21716–47008	5–5	2.11+07	7284.840	33413–47136	3–2	4.99+06	3766.092	20875–47420	3–2	5.97+06
3997.395	21999–47008	4–5	9.01+07	2562.224	8155–47172	1–0	1.06+08	3971.820	22249–47420	3–2	1.07+06
4304.540	23784–47008	5–5	2.24+06	3418.507	17927–47172	1–0	1.46+09	4066.979	22838–47420	2–2	4.78+07
4367.580	24119–47008	4–5	1.07+07	4126.880	22947–47172	1–0	5.64+06	4085.011	22947–47420	1–2	2.99+07
4456.330	24575–47008	4–5	1.45+06	4463.140	24772–47172	1–0	5.66+06	4330.820	24336–47420	2–2	3.67+05
4839.550	26351–47008	5–5	1.31+06	2550.812	7986–47177	2–1	1.79+07	5029.620	27543–47420	1–2	1.60+06
5649.660	29313–47008	6–5	8.02+05	2561.856	8155–47177	1–1	1.85+07	5539.270	29372–47420	3–2	1.38+06
2521.920	7377–47017	4–3	2.14+07	2922.383	12969–47177	2–1	7.14+06	2468.880	6928–47420	5–5	1.59+08
2561.262	7986–47017	2–3	4.45+06	3394.585	17727–47177	2–1	1.33+08	2496.534	7377–47420	4–5	1.29+08
2852.952	11976–47017	4–3	1.19+06	3417.843	17927–47177	1–1	5.22+08	3566.590	19390–47420	6–5	2.82+06
2901.382	12561–47017	3–3	2.51+07	3471.346	18378–47177	2–1	1.49+08	3596.198	19621–47420	5–5	6.82+06
2936.120	12969–47017	2–3	6.75+06	3683.616	20038–47177	0–1	8.97+06	3889.284	21716–47420	5–5	8.82+05
3392.654	17550–47017	3–3	2.21+08	4107.492	22838–47177	2–1	1.54+08	4229.540	23784–47420	5–5	2.47+06
3413.134	17727–47017	2–3	3.88+08	4125.883	22947–47177	1–1	1.24+07	4290.380	24119–47420	4–5	3.47+06
3824.076	20875–47017	3–3	1.29+07	4376.780	24336–47177	2–1	6.21+06	2516.572	7728–47453	3–4	1.08+07
3848.299	21039–47017	2–3	3.75+06	4526.560	25092–47177	0–1	6.08+06	3343.240	17550–47453	3–4	7.49+05
3995.986	21999–47017	4–3	1.26+07	4813.120	26406–47177	1–1	1.07+06	3728.670	20641–47453	4–4	1.32+07
4036.370	22249–47017	3–3	5.53+05	2532.876	7728–47197	3–2	1.14+07	3761.410	20875–47453	3–4	5.92+06
4134.680	22838–47017	2–3	8.35+07	2560.558	8155–47197	1–2	1.28+07	3884.361	21716–47453	5–4	1.97+07
4365.900	24119–47017	4–3	1.84+06	2886.317	12561–47197	3–2	8.57+06	4223.730	23784–47453	5–4	4.92+05
4808.160	26225–47017	3–3	5.77+05	2920.691	12969–47197	2–2	5.93+07	4284.420	24119–47453	4–4	6.16+05
7068.420	32874–47017	4–3	7.35+06	3372.074	17550–47197	3–2	2.13+07	4369.770	24575–47453	4–4	2.77+07
2539.575	7728–47093	3–3	1.89+06	3392.306	17727–47197	2–2	1.27+08	4737.630	26351–47453	5–4	1.00+06
2846.831	11976–47093	4–3	6.27+06	3415.532	17927–47197	1–2	5.85+07	5365.400	28820–47453	5–4	1.13+07
2895.036	12561–47093	3–3	5.04+07	3616.326	19552–47197	1–2	1.09+07	5529.130	29372–47453	3–4	5.73+05
2929.620	12969–47093	2–3	6.34+06	3797.950	20875–47197	3–2	8.22+06	5662.940	29799–47453	4–4	1.89+06
3383.981	17550–47093	3–3	1.09+08	3821.836	21039–47197	2–2	4.56+07	6857.250	32874–47453	4–4	1.29+06
3404.356	17727–47093	2–3	2.15+08	4007.274	22249–47197	3–2	2.94+07	2890.414	12969–47556	2–1	1.55+06
3481.558	18378–47093	2–3	1.96+06	4122.522	22947–47197	1–2	1.92+07	3351.524	17727–47556	2–1	3.10+07
3661.360	19788–47093	4–3	6.01+06	4372.990	24336–47197	2–2	1.21+06	3374.176	17927–47556	1–1	1.68+07
3813.059	20875–47093	3–3	5.54+07	7443.030	33765–47197	2–2	4.37+06	3426.337	18378–47556	2–1	1.24+08
3837.137	21039–47093	2–3	8.47+06	2555.648	8155–47272	1–1	6.95+06	3632.980	20038–47556	0–1	8.35+07
3983.959	21999–47093	4–3	5.96+07	3383.692	17727–47272	2–1	1.04+08	4044.612	22838–47556	2–1	8.88+07
4024.109	22249–47093	3–3	3.07+06	3406.802	17927–47272	1–1	2.58+08	4062.444	22947–47556	1–1	1.50+08
4121.805	22838–47093	2–3	1.80+07	3670.810	20038–47272	0–1	2.93+07	4079.841	23052–47556	0–1	4.48+07
4351.550	24119–47093	4–3	6.90+06	4091.557	22838–47272	2–1	7.64+06	4305.450	24336–47556	2–1	4.02+07
4439.640	24575–47093	4–3	6.47+05	4109.805	22947–47272	1–1	1.02+08	4387.900	24772–47556	1–1	2.80+07
5636.690	29357–47093	2–3	1.92+06	4127.611	23052–47272	0–1	9.90+07	4450.320	25092–47556	0–1	5.70+06
7307.940	33413–47093	3–3	5.11+06	4507.230	25092–47272	0–1	3.97+05	4727.000	26406–47556	1–1	5.53+05
2516.249	7377–47107	4–4	1.22+07	4791.250	26406–47272	1–1	2.02+06	4776.070	26624–47556	2–1	1.80+06
2845.714	11976–47107	4–4	1.12+08	4841.680	26624–47272	2–1	2.49+05	2458.564	6928–47590	5–4	5.18+06

TABLE 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*—Continued

Wave length Å	Energy Levels K	*J*-values	A	Wave-length Å	Energy Levels K	*J*-values	A	Wave-length Å	Energy Levels K	*J*-values	A
2485.989	7377−47590	4−4	2.21+07	3564.533	19788−47834	4−3	2.22+07	2453.477	7377−48123	4−3	9.96+07
2507.899	7728−47590	3−4	1.17+08	3730.945	21039−47834	2−3	3.60+07	2474.815	7728−48123	3−3	3.09+08
3327.961	17550−47590	3−4	3.48+05	3907.464	22249−47834	3−3	7.70+06	2765.700	11976−48123	4−3	1.64+06
3595.857	19788−47590	4−4	4.11+06	4254.940	24339−47834	3−3	1.75+06	2811.160	12561−48123	3−3	1.58+06
3709.665	20641−47590	4−4	1.28+07	4714.180	26628−47834	4−3	5.54+05	3269.964	17550−48123	3−3	1.99+06
3863.745	21716−47590	5−4	1.13+07	5543.180	29799−47834	4−3	5.41+06	3288.967	17727−48123	2−3	1.27+07
3945.119	22249−47590	3−4	9.86+06	2443.873	6928−47835	5−5	4.66+07	3668.893	20875−48123	3−3	4.66+06
4343.700	24575−47590	4−4	3.24+06	2787.933	11976−47835	4−5	1.56+07	3826.836	21999−48123	4−3	1.05+07
6793.260	32874−47590	4−4	7.44+05	3514.626	19390−47835	6−5	8.56+06	3953.861	22838−48123	2−3	4.83+06
2457.598	6928−47606	5−5	2.03+08	3543.392	19621−47835	5−5	6.69+06	4164.800	24119−48123	4−3	1.14+06
2805.808	11976−47606	4−5	1.92+06	3676.314	20641−47835	4−5	6.07+07	6796.110	33413−48123	3−3	1.49+06
3707.458	20641−47606	4−5	4.27+06	3827.575	21716−47835	5−5	8.48+06	3265.618	17550−48163	3−2	3.78+08
3861.341	21716−47606	5−5	1.16+07	3869.561	21999−47835	4−5	1.35+07	3284.589	17727−48163	2−2	6.19+07
4196.530	23784−47606	5−5	1.39+07	4156.670	23784−47835	5−5	5.84+06	3306.356	17927−48163	1−2	8.83+08
4649.830	26106−47606	6−5	3.84+05	4298.040	24575−47835	4−5	9.28+06	3356.403	18378−48163	2−2	3.11+07
2517.658	7986−47693	2−3	1.16+08	4600.940	26106−47835	6−5	6.00+05	3494.170	19552−48163	1−2	1.20+07
2878.962	12969−47693	2−3	2.50+06	2438.183	6928−47930	5−4	3.89+07	3663.458	20875−48163	3−2	1.98+07
3695.507	20641−47693	4−3	4.49+06	2465.150	7377−47930	4−4	1.95+08	3947.533	22838−48163	2−2	4.00+07
3750.677	21039−47693	2−3	1.04+07	2486.690	7728−47930	3−4	8.56+07	3964.517	22947−48163	1−2	1.73+07
3890.844	21999−47693	4−3	1.69+07	2780.526	11976−47930	4−4	1.80+06	4195.620	24336−48163	2−2	1.51+07
3929.114	22249−47693	3−3	5.23+06	3290.714	17550−47930	3−4	3.54+06	4273.870	24772−48163	1−2	5.29+06
4022.212	22838−47693	2−3	1.20+06	3531.446	19621−47930	5−4	5.99+06	4556.940	26225−48163	3−2	1.14+06
7000.630	33413−47693	3−3	2.17+06	3552.420	19788−47930	4−4	2.15+06	4594.960	26406−48163	1−2	2.63+05
4056.530	23111−47756	3−3	6.49+05	3695.054	20875−47930	3−4	1.28+08	5320.050	29372−48163	3−2	1.67+06
4574.240	25900−47756	4−3	1.07+06	3813.638	21716−47930	5−4	8.73+06	4002.665	23245−48221	1−1	3.05+06
4625.050	26140−47756	3−3	1.07+07	3855.329	21999−47930	4−4	3.48+06	4006.768	23270−48221	0−1	1.27+07
4668.140	26340−47756	2−3	2.24+07	3892.894	22249−47930	3−4	2.77+06	4568.790	26340−48221	2−1	2.81+06
4855.680	27167−47756	4−3	1.93+06	4237.680	24339−47930	3−4	7.07+05	4598.120	26479−48221	1−1	2.20+07
4910.030	27395−47756	3−3	4.64+06	6639.900	32874−47930	4−4	5.12+05	4613.210	26550−48221	0−1	1.45+07
4950.110	27560−47756	2−3	3.31+06	4531.630	25900−47961	4−4	2.35+06	4838.520	27560−48221	2−1	4.06+06
5466.990	29469−47756	2−3	1.79+06	4581.520	26140−47961	3−4	3.49+06	4863.650	27666−48221	1−1	6.09+06
7016.440	33507−47756	3−3	7.70+06	4741.080	26875−47961	5−4	8.76+05	7038.250	34017−48221	1−1	2.11+07
7164.470	33802−47756	2−3	3.22+07	4807.720	27167−47961	4−4	1.38+06	7090.400	34122−48221	0−1	3.69+07
7239.880	33947−47756	2−3	6.59+06	4860.990	27395−47961	3−4	5.26+05	7311.100	34547−48221	2−1	2.29+07
7288.760	34040−47756	4−3	6.66+06	6003.030	31307−47961	4−4	8.08+06	7389.420	34692−48221	1−1	6.47+07
7445.780	34329−47756	3−3	5.95+07	6008.580	31323−47961	3−4	9.05+06	8085.200	35856−48221	2−1	1.39+08
7568.920	34547−47756	2−3	1.26+07	6188.040	31805−47961	3−4	2.58+06	3466.279	19390−48231	6−5	2.32+06
7998.970	35257−47756	4−3	7.12+07	6725.390	33096−47961	4−4	7.23+05	3623.440	20641−48231	4−5	1.76+07
8232.350	35612−47756	3−3	1.22+07	6916.700	33507−47961	3−4	4.62+06	3770.305	21716−48231	5−5	1.35+07
8339.430	35768−47756	4−3	1.80+07	7008.010	33695−47961	5−4	2.15+06	4089.225	23784−48231	5−5	3.72+06
8562.110	36079−47756	3−3	1.63+06	7181.220	34040−47961	4−4	6.64+06	4146.070	24119−48231	4−5	4.78+06
9437.910	37163−47756	3−3	4.06+06	7333.620	34329−47961	3−4	1.79+06	4225.960	24575−48231	4−5	9.39+06
2445.213	6928−47812	5−4	1.03+07	7586.040	34782−47961	5−4	3.67+07	4518.450	26106−48231	6−5	2.42+05
2493.998	7728−47812	3−4	3.44+07	7869.650	35257−47961	4−4	1.49+06	4627.530	26628−48231	4−5	3.66+05
2835.951	12561−47812	3−4	6.54+06	7945.880	35379−47961	5−4	5.55+07	5284.420	29313−48231	6−5	1.14+06
3546.210	19621−47812	5−4	3.90+06	8198.950	35768−47961	4−4	1.25+07	2467.733	7728−48239	3−2	7.63+07
3567.360	19788−47812	4−4	8.06+06	8866.960	36686−47961	4−4	4.66+07	2483.531	7986−48239	2−2	1.50+08
3679.330	20641−47812	4−4	4.16+06	9258.300	37163−47961	3−4	1.38+07	2834.414	12969−48239	2−2	1.96+06
3711.224	20875−47812	3−4	4.09+07	2084.122	0−47967	4−3	3.28+09	3257.594	17550−48239	3−2	9.14+07
3830.864	21716−47812	5−4	1.03+07	3286.754	17550−47967	3−3	6.46+08	3276.471	17727−48239	2−2	3.21+07
3872.923	21999−47812	4−4	6.53+06	3305.972	17727−47967	2−3	4.84+08	3298.133	17927−48239	1−2	9.78+07
3910.846	22249−47812	3−4	1.16+07	3658.550	20641−47967	4−3	5.72+06	3347.927	18378−48239	2−2	4.76+07
4160.560	23784−47812	5−4	7.46+05	3978.464	22838−47967	2−3	3.27+06	3484.972	19552−48239	1−2	1.92+07
4258.960	24339−47812	3−4	2.52+06	4230.580	24336−47967	2−3	6.32+05	3653.352	20875−48239	3−2	3.48+06
4302.190	24575−47812	4−4	6.21+06	4032.469	23245−48037	1−2	4.58+06	3675.434	21039−48239	2−2	1.34+06
4658.290	26351−47812	5−4	4.11+05	4565.670	26140−48037	3−2	2.41+06	3935.814	22838−48239	2−2	6.87+07
5263.870	28820−47812	5−4	2.44+06	4607.660	26340−48037	2−2	1.43+07	3952.702	22947−48239	1−2	2.42+07
2508.948	7986−47831	2−2	2.13+06	4637.510	26479−48037	1−2	1.62+07	4182.380	24336−48239	2−2	3.42+07
2519.630	8155−47831	1−2	1.33+08	4843.160	27395−48037	3−2	2.96+06	4260.140	24772−48239	1−2	1.44+07
2867.563	12969−47831	2−2	1.70+07	4882.150	27560−48037	2−2	4.62+06	4541.320	26225−48239	3−2	8.76+05
3731.376	21039−47831	2−2	4.01+07	4907.740	27666−48037	1−2	2.69+06	4579.060	26406−48239	1−2	5.69+05
3907.937	22249−47831	3−2	4.39+07	7022.980	33802−48037	2−2	1.20+07	5298.780	29372−48239	3−2	3.70+06
4255.500	24339−47831	3−2	3.62+06	7095.420	33947−48037	2−2	3.39+06	3271.001	17727−48290	2−1	6.62+08
7107.460	33765−47831	2−2	3.18+06	7130.940	34017−48037	1−2	3.51+07	3292.591	17927−48290	1−1	3.35+08
2470.961	7377−47834	4−3	3.20+07	7293.070	34329−48037	3−2	1.61+07	3342.216	18378−48290	2−1	8.75+07
2492.640	7728−47834	3−3	1.37+07	7411.180	34547−48037	2−2	4.70+07	3478.788	19552−48290	1−1	1.12+07
2508.751	7986−47834	2−3	1.39+07	7491.680	34692−48037	1−2	1.42+07	3538.550	20038−48290	0−1	1.79+07
2834.177	12561−47834	3−3	1.30+06	8046.070	35612−48037	3−2	9.56+07	3944.748	22947−48290	1−1	9.96+06
2867.311	12969−47834	2−3	9.90+06	8207.770	35856−48037	2−2	1.56+07	3961.147	23052−48290	0−1	1.80+07
3393.915	18378−47834	2−3	6.15+06	8360.820	36079−48037	3−2	1.31+06	4309.460	25092−48290	0−1	1.52+07

TABLE 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*—Continued

Wave length Å	Energy Levels K	*J*-values	A
4614.220	26624−48290	2−1	1.96+06
2463.728	7728−48305	3−2	6.85+07
2479.481	7986−48305	2−2	1.41+08
2489.917	8155−48305	1−2	1.28+08
2796.872	12561−48305	3−2	4.74+06
3250.625	17550−48305	3−2	4.62+07
3269.416	17727−48305	2−2	1.51+06
3290.990	17927−48305	1−2	7.66+07
3340.567	18378−48305	2−2	5.90+07
3477.007	19552−48305	1−2	4.43+07
3925.646	22838−48305	2−2	5.26+07
3942.442	22947−48305	1−2	5.22+07
4170.900	24336−48305	2−2	4.25+07
4248.230	24772−48305	1−2	2.30+07
4527.780	26225−48305	3−2	3.95+05
4565.320	26406−48305	1−2	1.55+06
4611.080	26624−48305	2−2	5.14+05
4815.230	27543−48305	1−2	3.83+05
5280.360	29372−48305	3−2	6.97+06
6713.190	33413−48305	3−2	9.66+05
2476.654	7986−48351	2−1	1.60+08
2487.064	8155−48351	1−1	3.64+08
3264.512	17727−48351	2−1	9.65+07
3286.022	17927−48351	1−1	2.39+07
3935.306	22947−48351	1−1	2.00+07
3951.638	23052−48351	0−1	1.81+06
4239.960	24772−48351	1−1	1.94+06
2792.397	12561−48362	3−4	8.57+06
3478.374	19621−48362	5−4	2.71+06
3636.995	20875−48362	3−4	2.84+07
3751.820	21716−48362	5−4	5.58+06
3792.156	21999−48362	4−4	1.58+07
4161.490	24339−48362	3−4	1.89+06
4202.760	24575−48362	4−4	8.67+04
4541.950	26351−48362	5−4	3.02+05
2411.558	6928−48383	5−5	8.59+06
3475.867	19621−48383	5−5	2.22+07
3496.190	19788−48383	4−5	4.91+06
3603.673	20641−48383	4−5	2.85+06
3789.178	21999−48383	4−5	1.45+07
4120.209	24119−48383	4−5	1.48+07
4199.100	24575−48383	4−5	2.36+08
4487.750	26106−48383	6−5	4.41+05
4537.680	26351−48383	5−5	3.67+05
4595.360	26628−48383	4−5	3.34+06
5242.500	29313−48383	6−5	1.41+07
5379.580	29799−48383	4−5	3.44+06
3274.227	17927−48460	1−0	9.60+06
3458.304	19552−48460	1−0	3.35+08
3918.418	22947−48460	1−0	2.22+08
4220.350	24772−48460	1−0	1.10+08
4533.140	26406−48460	1−0	7.58+06
4779.440	27543−48460	1−0	1.21+07
5223.190	29320−48460	1−0	1.50+07
2815.506	12969−48476	2−3	1.07+07
3251.236	17727−48476	2−3	6.82+07
3484.858	19788−48476	4−3	5.41+06
3643.716	21039−48476	2−3	4.62+07
3775.860	21999−48476	4−3	4.72+06
3811.892	22249−48476	3−3	2.07+07
4104.472	24119−48476	4−3	6.47+05
4141.862	24339−48476	3−3	5.80+06
4575.800	26628−48476	4−3	5.58+05
2476.861	8155−48516	1−1	1.66+07
3246.962	17727−48516	2−1	1.75+08
3268.234	17927−48516	1−1	7.91+07
3317.121	18378−48516	2−1	5.44+07
3451.628	19552−48516	1−1	6.18+07
3893.316	22838−48516	2−1	2.73+07
3909.830	22947−48516	1−1	5.40+07
3925.946	23052−48516	0−1	1.09+08
4134.433	24336−48516	2−1	2.54+07
4267.830	25092−48516	0−1	5.98+07
4566.520	26624−48516	2−1	5.47+06
5020.820	28605−48516	2−1	1.60+06
5207.940	29320−48516	1−1	5.17+06
5217.930	29357−48516	2−1	1.03+07
4504.840	26340−48532	2−3	1.67+06
4679.230	27167−48532	4−3	2.51+06
4729.700	27395−48532	3−3	9.54+05
4766.880	27560−48532	2−3	1.13+06
5804.070	31307−48532	4−3	2.20+06
5809.240	31323−48532	3−3	4.48+06
5934.660	31686−48532	2−3	1.16+07
5976.800	31805−48532	3−3	7.88+06
6096.690	32134−48532	2−3	2.88+06
6653.880	33507−48532	3−3	3.66+05
6786.880	33802−48532	2−3	1.80+06
7038.820	34329−48532	3−3	3.05+06
7148.690	34547−48532	2−3	2.30+06
7531.170	35257−48532	4−3	2.79+07
7832.220	35768−48532	4−3	6.79+07
8028.340	36079−48532	3−3	1.51+07
8439.600	36686−48532	4−3	1.34+07
8793.380	37163−48532	3−3	3.99+07
9079.600	37521−48532	2−3	1.52+07
9653.140	38175−48532	3−3	2.82+07
2722.032	11976−48703	4−4	3.36+06
3437.631	19621−48703	5−4	2.47+06
3457.512	19788−48703	4−4	1.77+06
3592.486	20875−48703	3−4	6.68+06
3704.464	21716−48703	5−4	1.51+08
3743.781	21999−48703	4−4	3.97+06
3779.213	22249−48703	3−4	1.70+06
4066.590	24119−48703	4−4	1.04+07
4143.417	24575−48703	4−4	1.91+08
4472.720	26351−48703	5−4	2.37+06
5028.130	28820−48703	5−4	9.39+06
5288.540	29799−48703	4−4	4.67+06
6315.810	32874−48703	4−4	3.27+06
4453.330	26479−48928	1−2	2.05+06
5798.190	31686−48928	2−2	5.78+06
5883.840	31937−48928	1−2	1.51+07
5952.750	32134−48928	2−2	1.04+07
7507.300	35612−48928	3−2	1.58+07
7780.590	36079−48928	3−2	8.64+07
8497.000	37163−48928	3−2	1.45+07
8764.000	37521−48928	2−2	6.65+07
9753.130	38678−48928	2−2	5.13+07
3211.872	17927−49053	1−2	1.38+08
4117.320	24772−49053	1−2	9.20+05
2692.250	11976−49109	4−4	6.45+06
3409.605	19788−49109	4−4	9.64+05
3511.748	20641−49109	4−4	8.29+06
3649.509	21716−49109	5−4	4.42+08
3687.656	21999−49109	4−4	1.57+08
4000.460	24119−49109	4−4	9.45+06
4074.789	24575−49109	4−4	3.38+07
4927.450	28820−49109	5−4	1.36+06
5065.210	29372−49109	3−4	5.25+06
5177.230	29799−49109	4−4	1.91+06
6157.730	32874−49109	4−4	6.93+06
3182.980	17727−49135	2−3	5.94+07
3537.491	20875−49135	3−3	3.18+07
3684.110	21999−49135	4−3	3.52+08
3718.409	22249−49135	3−3	7.57+07
3801.682	22838−49135	2−3	5.13+07
3996.261	24119−49135	4−3	1.11+06
4031.243	24336−49135	2−3	2.08+06
4031.727	24339−49135	3−3	2.39+06
4440.970	26624−49135	2−3	9.43+05
5054.650	29357−49135	2−3	1.13+06
6147.850	32874−49135	4−3	4.49+06
3173.663	17727−49227	2−3	3.24+07
2433.056	8155−49243	1−2	4.24+07
3192.417	17927−49243	1−2	1.63+07
3239.029	18378−49243	2−2	9.10+06
3367.159	19552−49243	1−2	2.60+08
3524.075	20875−49243	3−2	1.28+08
3544.631	21039−49243	2−2	3.39+07
3786.176	22838−49243	2−2	8.78+07
3801.804	22947−49243	1−2	2.88+07
4013.822	24336−49243	2−2	1.87+07
4343.260	26225−49243	3−2	6.37+06
4377.790	26406−49243	1−2	3.22+06
6315.420	33413−49243	3−2	3.38+06
2408.045	7728−49243	3−3	2.69+06
2725.311	12561−49243	3−3	1.33+07
3172.067	17727−49243	2−3	2.70+07
3394.085	19788−49243	4−3	9.38+06
3495.288	20641−49243	4−3	1.57+08
3669.523	21999−49243	4−3	3.58+08
3703.556	22249−49243	3−3	9.26+07
4013.798	24336−49243	2−3	5.71+06
4014.280	24339−49243	3−3	3.36+06
4052.664	24575−49243	4−3	4.35+06
4343.210	26225−49243	3−3	1.07+06
4844.000	28605−49243	2−3	1.52+06
5027.210	29357−49243	2−3	5.38+06
6315.320	33413−49243	3−3	8.00+06
2429.810	8155−49298	1−1	1.71+07
2751.808	12969−49298	2−1	1.53+07
3166.596	17727−49298	2−1	2.47+08
3360.922	19552−49298	1−1	1.12+07
3416.679	20038−49298	0−1	3.28+06
3537.729	21039−49298	2−1	2.07+08
3778.320	22838−49298	2−1	2.57+07
3793.872	22947−49298	1−1	5.19+07
3809.043	23052−49298	0−1	1.79+07
4004.976	24336−49298	2−1	2.50+07
4076.232	24772−49298	1−1	1.24+07
4409.120	26624−49298	2−1	7.33+06
6436.430	33765−49298	2−1	3.06+06
2741.578	12969−49433	2−2	1.66+07
3345.679	19552−49433	1−2	5.47+05
3520.855	21039−49433	2−2	2.84+07
3677.631	22249−49433	3−2	7.18+08
3983.350	24336−49433	2−2	4.33+06
4053.820	24772−49433	1−2	4.48+06
4566.990	27543−49433	1−2	1.22+06
4970.490	29320−49433	1−2	5.06+06
4979.590	29357−49433	2−2	8.97+05
6240.270	33413−49433	3−2	2.49+06
6380.750	33765−49433	2−2	1.31+07
3327.497	19390−49434	6−6	6.28+06
3353.267	19621−49434	5−6	3.90+06
3606.682	21716−49434	5−6	6.28+08
3897.452	23784−49434	5−6	1.18+07
4285.450	26106−49434	6−6	1.22+07
4330.960	26351−49434	5−6	1.20+06
4849.660	28820−49434	5−6	1.32+05
2666.966	11976−49461	4−5	4.02+07
3324.538	19390−49461	6−5	2.58+07
3369.146	19788−49461	4−5	3.02+06
3468.847	20641−49461	4−5	4.22+07
3603.207	21716−49461	5−5	3.04+08
3640.392	21999−49461	4−5	4.11+08
3893.393	23784−49461	5−5	7.67+07
3944.892	24119−49461	4−5	1.08+07
4017.152	24575−49461	4−5	2.94+07

TABLE 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*—Continued

Wave length Å	Energy Levels K	*J*-values	A	Wavelength Å	Energy Levels K	*J*-values	A	Wavelength Å	Energy Levels K	*J*-values	A
4280.530	26106–49461	6–5	9.39+05	3446.791	21039–50043	2–1	1.90+07	4745.810	29469–50534	2–3	1.54+07
4961.910	29313–49461	6–5	7.15+05	3674.766	22838–50043	2–1	1.33+08	5871.290	33507–50534	3–3	4.70+06
6027.060	32874–49461	4–5	8.62+06	3703.824	23052–50043	0–1	1.73+08	7261.540	36767–50534	3–3	8.86+06
3214.624	18378–49477	2–2	6.23+06	3888.825	24336–50043	2–1	1.57+08	9462.970	39970–50534	3–3	1.02+07
3671.689	22249–49477	3–2	9.10+06	3955.956	24772–50043	1–1	3.98+07	3364.639	20875–50587	3–3	3.01+06
3768.230	22947–49477	1–2	4.86+06	4006.631	25092–50043	0–1	6.15+07	3383.387	21039–50587	2–3	1.56+06
3976.390	24336–49477	2–2	4.26+06	4229.510	26406–50043	1–1	5.15+06	3602.774	22838–50587	2–3	6.59+06
3976.865	24339–49477	3–2	2.29+07	4268.740	26624–50043	2–1	3.50+07	3777.061	24119–50587	4–3	1.69+07
4046.629	24772–49477	1–2	6.23+06	4663.180	28605–50043	2–1	4.65+06	3808.286	24336–50587	2–3	1.02+07
4374.490	26624–49477	2–2	4.98+06	4824.160	29320–50043	1–1	5.10+06	3843.260	24575–50587	4–3	2.84+08
4789.650	28605–49477	2–2	3.79+07	4832.730	29357–50043	2–1	7.02+06	4103.620	26225–50587	3–3	8.82+05
4968.700	29357–49477	2–2	4.33+06	3063.149	17550–50187	3–2	2.49+06	4171.900	26624–50587	2–3	1.55+07
6362.890	33765–49477	2–2	5.15+06	3098.963	17927–50187	1–2	7.36+06	4547.850	28605–50587	2–3	4.75+07
2656.793	11976–49604	4–5	1.39+07	3142.891	18378–50187	2–2	9.21+07	4708.970	29357–50587	2–3	6.86+06
3308.761	19390–49604	6–5	2.41+06	3263.370	19552–50187	1–2	3.03+07	4809.150	29799–50587	4–3	8.47+05
3334.220	19621–49604	5–5	1.06+07	3655.467	22838–50187	2–2	1.75+08	3219.806	19562–50611	4–3	3.45+08
3352.929	19788–49604	4–5	2.24+06	3867.218	24336–50187	2–2	1.84+08	3240.122	19757–50611	3–3	6.19+06
3584.663	21716–49604	5–5	3.57+08	3933.606	24772–50187	1–2	5.01+07	3620.228	22997–50611	4–3	1.57+07
3621.464	21999–49604	4–5	5.05+08	4172.130	26225–50187	3–2	1.02+08	3716.442	23711–50611	4–3	3.11+08
3871.751	23784–49604	5–5	3.59+07	4242.730	26624–50187	2–2	1.19+07	3782.450	24181–50611	3–3	1.89+07
3994.117	24575–49604	4–5	9.74+06	4799.410	29357–50187	2–2	3.69+06	4085.312	26140–50611	3–3	5.50+07
4809.950	28820–49604	5–5	3.96+05	4802.880	29372–50187	3–2	1.01+07	4118.904	26340–50611	2–3	9.63+06
2655.140	11976–49628	4–4	1.87+06	3225.789	19351–50342	5–6	1.03+09	4264.210	27167–50611	4–3	1.13+07
2697.022	12561–49628	3–4	3.61+07	3610.159	22650–50342	6–6	5.58+08	4638.020	29056–50611	3–3	2.57+07
3331.613	19621–49628	5–4	2.06+07	4260.000	26875–50342	5–6	6.80+06	4728.560	29469–50611	2–3	1.84+07
3350.284	19788–49628	4–4	3.38+06	3222.069	19351–50378	5–5	8.50+08	7221.220	36767–50611	3–3	8.24+06
3448.869	20641–49628	4–4	4.11+06	3244.190	19562–50378	4–5	3.74+08	9100.500	39626–50611	4–3	2.32+07
3476.853	20875–49628	3–4	5.72+07	3651.100	22997–50378	4–5	1.45+07	9394.710	39970–50611	3–3	8.27+06
3581.650	21716–49628	5–4	5.39+07	3748.969	23711–50378	4–5	1.47+08	3243.109	19788–50614	4–4	9.60+06
3618.392	21999–49628	4–4	1.01+08	3217.380	19351–50423	5–4	2.09+08	3459.429	21716–50614	5–4	2.73+07
3651.470	22249–49628	3–4	6.53+08	3239.436	19562–50423	4–4	5.30+08	3493.698	21999–50614	4–4	3.14+07
3868.243	23784–49628	5–4	2.16+06	3259.991	19757–50423	3–4	4.45+07	3839.258	24575–50614	4–4	1.72+08
3919.068	24119–49628	4–4	2.26+07	3625.140	22846–50423	5–4	1.06+08	4167.860	26628–50614	4–4	7.15+06
3953.155	24339–49628	3–4	2.49+07	3645.090	22997–50423	4–4	5.03+07	4587.130	28820–50614	5–4	5.64+06
3990.377	24575–49628	4–4	1.12+07	3660.330	23111–50423	3–4	6.57+06	5811.940	33413–50614	3–4	3.20+06
4346.560	26628–49628	4–4	7.13+06	3742.621	23711–50423	4–4	1.17+08	3570.243	22650–50652	6–7	1.35+09
4804.530	28820–49628	5–4	9.69+05	4076.636	25900–50423	4–4	8.60+07	3230.963	19757–50699	3–2	4.03+08
6165.370	33413–49628	3–4	4.57+06	4116.970	26140–50423	3–4	1.46+06	3247.278	19913–50699	2–2	1.10+08
2648.164	11976–49727	4–4	2.62+06	4245.360	26875–50423	5–4	1.51+07	3641.454	23245–50699	1–2	7.43+06
2689.830	12561–49727	3–4	3.93+07	4341.250	27395–50423	3–4	5.37+05	3769.995	24181–50699	3–2	4.91+07
3320.650	19621–49727	5–4	1.42+07	4678.850	29056–50423	3–4	4.84+07	4070.766	26140–50699	3–2	8.80+07
3339.195	19788–49727	4–4	1.57+07	7320.690	36767–50423	3–4	9.46+06	4104.132	26340–50699	2–2	3.29+07
3464.914	20875–49727	3–4	7.84+06	9259.050	39626–50423	4–4	2.05+07	4127.807	26479–50699	1–2	4.29+07
3568.978	21716–49727	5–4	5.74+07	3211.989	19351–50475	5–4	4.83+08	4289.920	27395–50699	3–2	7.92+06
3605.450	21999–49727	4–4	7.58+08	3233.967	19562–50475	4–4	2.33+08	4320.520	27560–50699	2–2	2.10+06
3638.300	22249–49727	3–4	2.90+08	3618.285	22846–50475	5–4	1.26+07	4619.290	29056–50699	3–2	3.42+07
3853.462	23784–49727	5–4	6.19+06	3735.325	23711–50475	4–4	2.77+08	4709.090	29469–50699	2–2	2.13+07
3903.901	24119–49727	4–4	5.14+07	4067.984	25900–50475	4–4	9.97+07	4768.330	29733–50699	1–2	1.22+07
4327.920	26628–49727	4–4	5.90+06	4108.138	26140–50475	3–4	1.95+06	7175.940	36767–50699	3–2	1.29+07
6127.910	33413–49727	3–4	5.00+06	4667.460	29056–50475	3–4	3.88+07	7382.990	37158–50699	2–2	9.49+06
2356.196	7377–49805	4–3	1.29+08	9214.450	39626–50475	4–4	1.99+07	9318.130	39970–50699	3–2	2.07+07
2680.910	12561–49851	3–3	2.41+06	3207.089	19351–50523	5–6	1.61+07	3188.567	19351–50704	5–5	4.83+07
2710.543	12969–49851	2–3	7.11+07	3586.740	22650–50523	6–6	3.99+07	3210.230	19562–50704	4–5	1.38+08
3325.468	19788–49851	4–3	3.67+07	3612.068	22846–50523	5–6	7.15+07	3588.615	22846–50704	5–5	1.55+08
3469.834	21039–49851	2–3	3.96+07	4227.430	26875–50523	5–6	2.94+08	3703.697	23711–50704	4–5	8.79+07
3589.456	21999–49851	4–3	2.33+07	5940.970	33695–50523	5–6	2.05+06	4030.499	25900–50704	4–5	5.14+07
3622.001	22249–49851	3–3	5.76+08	9738.620	40257–50523	5–6	8.57+07	4195.340	26875–50704	5–5	6.40+07
3885.154	24119–49851	4–3	1.09+07	3227.798	19562–50534	4–3	6.48+08	4247.430	27167–50704	4–5	1.25+08
3918.644	24339–49851	3–3	1.00+08	3248.206	19757–50534	3–3	2.17+08	9024.470	39626–50704	4–5	2.00+07
4231.530	26225–49851	3–3	2.92+08	3264.710	19913–50534	2–3	1.91+07	9569.960	40257–50704	5–5	3.09+07
4705.460	28605–49851	2–3	2.77+06	3630.353	22997–50534	4–3	8.31+07	9889.080	40594–50704	4–5	5.03+07
6215.150	33765–49851	2–3	7.43+06	3645.494	23111–50534	3–3	3.60+07	3178.015	19351–50808	5–4	1.48+08
3121.760	17927–49951	1–0	5.35+07	3656.358	23193–50534	2–3	8.19+06	3199.530	19562–50808	4–4	3.58+08
3288.651	19552–49951	1–0	7.30+07	3727.096	23711–50534	4–3	1.57+08	3219.581	19757–50808	3–4	4.55+08
3702.033	22947–49951	1–0	4.68+08	3793.478	24181–50534	3–3	3.56+07	3575.249	22846–50808	5–4	1.09+08
3970.391	24772–49951	1–0	2.82+08	4058.227	25900–50534	4–3	3.11+07	3594.632	22997–50808	4–4	3.26+08
4246.020	26406–49951	1–0	1.42+07	4098.183	26140–50534	3–3	4.62+07	3609.486	23111–50808	3–4	1.29+07
4461.370	27543–49951	1–0	2.81+07	4278.230	27167–50534	4–3	5.33+06	3689.457	23711–50808	4–4	3.80+08
3278.741	19552–50043	1–1	8.77+07	4320.380	27395–50534	3–3	9.73+05	3754.506	24181–50808	3–4	2.66+07
3331.778	20038–50043	0–1	4.67+07	4584.720	29056–50534	3–3	2.55+06	4013.641	25900–50808	4–4	6.71+06

Table 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*—Continued

Wave length Å	Energy Levels K	*J*-values	A
4052.724	26140–50808	3–4	4.66+06
4228.720	27167–50808	4–4	1.23+06
4596.060	29056–50808	3–4	6.30+06
7120.030	36767–50808	3–4	3.15+06
3175.447	19351–50833	5–5	1.68+08
3196.930	19562–50833	4–5	6.74+08
3547.203	22650–50833	6–5	3.45+07
3571.995	22846–50833	5–5	2.83+08
3591.345	22997–50833	4–5	2.08+07
3685.998	23711–50833	4–5	3.51+08
4172.640	26875–50833	5–5	1.50+07
4224.180	27167–50833	4–5	6.55+07
9763.910	40594–50833	4–5	5.00+07
3230.210	19913–50861	2–2	1.97+08
3602.534	23111–50861	3–2	2.13+08
3613.110	23193–50861	2–2	3.36+07
3793.360	24507–50861	2–2	1.64+07
4043.993	26140–50861	3–2	3.45+07
4076.884	26340–50861	2–2	4.09+06
4584.820	29056–50861	3–2	6.15+06
4673.280	29469–50861	2–2	7.63+06
7093.090	36767–50861	3–2	5.50+06
3214.044	19757–50862	3–3	1.32+09
3602.460	23111–50862	3–3	1.33+08
3746.931	24181–50862	3–3	1.81+08
4076.810	26340–50862	2–3	2.21+07
4673.170	29469–50862	2–3	1.72+07
7295.000	37158–50862	2–3	4.78+06
9178.570	39970–50862	3–3	1.00+07
3228.254	19913–50880	2–1	3.69+08
3610.703	23193–50880	2–1	1.20+08
3620.880	23270–50880	0–1	2.49+07
3790.656	24507–50880	2–1	2.61+07
4073.760	26340–50880	2–1	1.27+08
4097.099	26479–50880	1–1	1.78+07
4109.070	26550–50880	0–1	2.80+07
4286.870	27560–50880	2–1	8.52+06
4669.170	29469–50880	2–1	3.86+07
4727.400	29733–50880	1–1	3.85+07
3161.949	19351–50968	5–6	8.18+07
3530.385	22650–50968	6–6	7.53+07
3554.922	22846–50968	5–6	9.14+08
4149.372	26875–50968	5–6	2.49+07
3182.060	19562–50980	4–4	4.76+07
3572.600	22997–50980	4–4	3.07+07
3587.240	23111–50980	3–4	6.07+07
4024.735	26140–50980	3–4	4.71+07
4147.347	26875–50980	5–4	3.22+06
4198.270	27167–50980	4–4	9.26+07
4238.820	27395–50980	3–4	1.65+08
4560.100	29056–50980	3–4	3.05+06
9626.560	40594–50980	4–4	5.83+07
9861.790	40842–50980	3–4	4.31+07
3228.900	20020–50981	1–0	4.56+08
3604.383	23245–50981	1–0	1.27+08
4080.226	26479–50981	1–0	1.98+08
4704.960	29733–50981	1–0	8.55+07
7366.370	37410–50981	1–0	3.04+07
9452.450	40405–50981	1–0	1.04+08
3215.940	19913–50999	2–2	6.37+08
3227.063	20020–50999	1–2	7.44+07
3584.790	23111–50999	3–2	1.18+08
3595.308	23193–50999	2–2	9.50+07
3727.809	24181–50999	3–2	2.73+08
3773.699	24507–50999	2–2	3.06+07
4021.622	26140–50999	3–2	8.13+06
4054.180	26340–50999	2–2	6.50+06
4556.130	29056–50999	3–2	6.05+07
4643.470	29469–50999	2–2	2.16+07
4701.050	29733–50999	1–2	4.84+06

Wave-length Å	Energy Levels K	*J*-values	A
7024.650	36767–50999	3–2	1.22+07
7222.880	37158–50999	2–2	5.91+06
2267.465	6928–51017	5–5	1.34+08
4099.080	26628–51017	4–5	5.92+05
3160.344	19390–51023	6–6	3.51+07
3183.582	19621–51023	5–6	4.16+06
3411.134	21716–51023	5–6	6.60+06
3670.071	23784–51023	5–6	9.46+07
4012.160	26106–51023	6–6	9.97+05
4502.590	28820–51023	5–6	1.34+06
4604.850	29313–51023	6–6	5.12+05
3210.830	19913–51048	2–1	9.55+08
3221.931	20020–51048	1–1	3.07+07
3588.918	23193–51048	2–1	3.19+08
3598.980	23270–51048	0–1	5.14+07
3766.665	24507–51048	2–1	7.61+07
4069.080	26479–51048	1–1	1.30+07
4080.886	26550–51048	0–1	1.83+07
4256.210	27560–51048	2–1	7.68+06
4632.820	29469–51048	2–1	9.16+06
4690.150	29733–51048	1–1	2.24+07
7330.150	37410–51048	1–1	9.62+06
9242.320	40231–51048	2–1	3.10+07
2557.268	11976–51069	4–5	3.67+06
3155.796	19390–51069	6–5	3.73+06
3178.967	19621–51069	5–5	3.13+07
3405.830	21716–51069	5–5	1.76+07
3439.039	21999–51069	4–5	1.47+07
3663.950	23784–51069	5–5	8.56+06
3709.535	24119–51069	4–5	5.03+07
3773.364	24575–51069	4–5	4.23+06
4004.832	26106–51069	6–5	1.76+07
4595.210	29313–51069	6–5	6.39+05
4700.170	29799–51069	4–5	3.86+06
5494.460	32874–51069	4–5	2.29+06
2264.389	6928–51077	5–4	1.54+08
3404.923	21716–51077	5–4	5.17+06
3537.896	22846–51103	5–5	7.84+07
3556.877	22997–51103	4–5	4.36+08
3649.699	23711–51103	4–5	1.58+07
3966.630	25900–51103	4–5	1.04+08
4126.192	26875–51103	5–5	2.14+07
4176.570	27167–51103	4–5	5.25+07
8710.290	39626–51103	4–5	2.05+07
9217.540	40257–51103	5–5	1.63+07
9513.240	40594–51103	4–5	3.59+07
3165.005	19562–51149	4–3	5.76+07
3184.622	19757–51149	3–3	4.41+07
3200.475	19913–51149	2–3	5.89+08
3551.114	22997–51149	4–3	7.25+06
3565.583	23111–51149	3–3	5.33+08
3643.627	23711–51149	4–3	1.54+08
3752.420	24507–51149	2–3	2.41+07
4029.640	26340–51149	2–3	2.89+07
4168.620	27167–51149	4–3	4.69+06
4208.610	27395–51149	3–3	6.35+07
4238.030	27560–51149	2–3	4.75+07
9699.700	40842–51149	3–3	2.93+07
3211.487	20020–51149	1–2	1.67+08
3582.690	23245–51149	1–2	3.62+07
3707.048	24181–51149	3–2	5.48+08
4052.466	26479–51149	1–2	1.18+07
4525.140	29056–51149	3–2	9.68+07
4611.280	29469–51149	2–2	6.45+07
6951.260	36767–51149	3–2	1.71+07
7145.320	37158–51149	2–2	1.44+07
3139.661	19351–51192	5–4	1.74+07
3160.658	19562–51192	4–4	2.02+08
3180.223	19757–51192	3–4	5.00+08
3545.639	22997–51192	4–4	2.06+08

Wave-length Å	Energy Levels K	*J*-values	A
3560.076	23111–51192	3–4	6.62+06
3637.862	23711–51192	4–4	8.56+07
3701.086	24181–51192	3–4	7.72+08
4111.060	26875–51192	5–4	2.49+06
4161.080	27167–51192	4–4	5.70+06
4200.930	27395–51192	3–4	3.53+07
4516.270	29056–51192	3–4	6.52+05
3296.467	20875–51201	3–2	2.59+07
3314.441	21039–51201	2–2	2.34+07
3453.022	22249–51201	3–2	1.08+08
3721.189	24336–51201	2–2	4.45+07
3721.606	24339–51201	3–2	1.09+08
3782.608	24772–51201	1–2	1.80+07
4031.965	26406–51201	1–2	6.01+07
4424.190	28605–51201	2–2	2.87+06
4568.840	29320–51201	1–2	3.31+06
4579.690	29372–51201	3–2	8.47+05
7010.360	36941–51201	2–2	9.30+06
3194.422	19913–51208	2–1	1.88+08
3205.400	20020–51208	1–1	1.20+09
3575.118	23245–51208	1–1	1.60+08
3578.380	23270–51208	0–1	8.03+07
3744.105	24507–51208	2–1	3.59+08
4598.730	29469–51208	2–1	2.55+06
3193.303	19913–51219	2–3	3.86+08
3556.680	23111–51219	3–3	5.16+07
3634.326	23711–51219	4–3	1.64+08
3697.426	24181–51219	3–3	1.86+08
4018.282	26340–51219	2–3	1.65+07
4156.460	27167–51219	4–3	5.72+06
4196.220	27395–51219	3–3	6.29+07
4225.460	27560–51219	2–3	1.01+08
4596.430	29469–51219	2–3	1.86+06
9634.220	40842–51219	3–3	2.93+07
9800.340	41018–51219	2–3	7.80+07
3157.040	19562–51229	4–5	1.38+08
3522.268	22846–51229	5–5	5.56+07
3541.083	22997–51229	4–5	7.42+08
3633.087	23711–51229	4–5	4.99+07
3947.002	25900–51229	4–5	2.55+07
4104.970	26875–51229	5–5	1.83+06
4154.810	27167–51229	4–5	8.74+07
8616.280	39626–51229	4–5	3.15+06
9401.090	40594–51229	4–5	1.87+07
3936.772	25900–51294	4–3	1.07+06
3974.397	26140–51294	3–3	6.76+06
4006.159	26340–51294	2–3	2.31+06
4183.020	27395–51294	3–3	3.85+06
4495.570	29056–51294	3–3	3.57+06
4580.600	29469–51294	2–3	3.21+06
5001.870	31307–51294	4–3	1.00+08
5005.720	31323–51294	3–3	8.12+07
5129.660	31805–51294	3–3	3.97+06
5493.510	33096–51294	4–3	5.12+06
5620.530	33507–51294	3–3	6.90+06
5715.110	33802–51294	2–3	1.53+07
5762.990	33947–51294	2–3	7.20+07
5793.930	34040–51294	4–3	6.35+06
5969.550	34547–51294	2–3	4.14+06
6843.670	36686–51294	4–3	1.81+07
7071.880	37158–51294	2–3	4.46+06
7620.540	38175–51294	3–3	3.27+07
9343.400	40594–51294	4–3	1.94+07
2580.281	12561–51305	3–4	1.69+07
2961.700	17550–51305	3–4	6.12+05
3155.293	19621–51305	5–4	2.97+07
3260.261	20641–51305	4–4	3.26+07
3378.676	21716–51305	5–4	1.39+08
3411.353	21999–51305	4–4	9.21+07
3632.558	23784–51305	5–4	6.60+07

TABLE 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*—Continued

Wave length Å	Energy Levels K	J-values	A
3986.176	26225–51305	3–4	4.67+07
4006.314	26351–51305	5–4	4.31+07
4558.110	29372–51305	3–4	1.59+06
5587.580	33413–51305	3–4	1.04+07
6976.930	36976–51305	3–4	3.83+06
7011.360	37046–51305	4–4	6.29+06
3192.799	20020–51331	1–2	5.35+08
3552.828	23193–51331	2–2	2.12+08
3726.927	24507–51331	2–2	3.42+08
4000.266	26340–51331	2–2	1.24+07
4022.744	26479–51331	1–2	7.38+06
4205.550	27560–51331	2–2	2.57+07
4224.520	27666–51331	1–2	4.12+07
4488.140	29056–51331	3–2	9.83+06
4572.850	29469–51331	2–2	1.40+06
9006.720	40231–51331	2–2	1.58+07
3146.475	19562–51335	4–4	3.36+06
3165.860	19757–51335	3–4	7.60+07
3509.120	22846–51335	5–4	1.48+07
3527.792	22997–51335	4–4	1.94+08
3542.076	23111–51335	3–4	8.58+08
3681.651	24181–51335	3–4	2.34+07
3967.964	26140–51335	3–4	3.67+07
4087.099	26875–51335	5–4	1.41+07
4136.512	27167–51335	4–4	9.30+06
5481.260	33096–51335	4–4	7.66+06
6862.480	36767–51335	3–4	5.11+06
8538.020	39626–51335	4–4	6.15+06
9307.940	40594–51335	4–4	1.39+07
3164.308	19757–51351	3–4	1.96+07
3525.856	22997–51351	4–4	4.88+07
3540.121	23111–51351	3–4	1.13+08
3679.530	24181–51351	3–4	2.76+07
3965.511	26140–51351	3–4	1.11+07
4084.498	26875–51351	5–4	7.77+07
4133.869	27167–51351	4–4	1.91+07
4484.230	29056–51351	3–4	6.30+07
5476.570	33096–51351	4–4	4.85+07
5602.770	33507–51351	3–4	2.02+07
5662.520	33695–51351	5–4	5.71+07
5775.090	34040–51351	4–4	1.55+07
5873.220	34329–51351	3–4	6.24+06
6212.040	35257–51351	4–4	2.49+06
6855.180	36767–51351	3–4	2.70+07
8526.680	39626–51351	4–4	1.63+07
8784.440	39970–51351	3–4	1.08+07
9012.100	40257–51351	5–4	6.65+07
9294.660	40594–51351	4–4	1.50+07
2272.816	7377–51361	4–3	1.15+08
2291.122	7728–51361	3–3	1.42+08
2956.710	17550–51361	3–3	1.55+07
2972.277	17727–51361	2–3	4.04+07
3404.755	21999–51361	4–3	1.23+07
3434.029	22249–51361	3–3	1.26+07
3699.147	24336–51361	2–3	2.38+07
4041.911	26628–51361	4–3	4.67+06
3030.605	18378–51365	2–3	6.30+06
3253.834	20641–51365	4–3	1.81+07
3504.455	22838–51365	2–3	8.98+06
3669.151	24119–51365	4–3	1.16+08
3698.611	24336–51365	2–3	6.71+07
4040.650	26624–51365	2–3	4.46+07
4041.288	26628–51365	4–3	1.35+07
4542.420	29357–51365	2–3	3.96+06
6947.500	36976–51365	3–3	8.69+06
3162.335	19757–51370	3–2	5.48+07
3188.819	20020–51370	1–2	2.46+08
3554.500	23245–51370	1–2	1.58+08
3676.879	24181–51370	3–2	3.22+07
4016.429	26479–51370	1–2	2.25+07
4169.770	27395–51370	3–2	7.06+06
4198.640	27560–51370	2–2	7.46+07
4217.550	27666–51370	1–2	1.41+08
4480.280	29056–51370	3–2	3.68+06
4564.710	29469–51370	2–2	3.47+06
9657.300	41018–51370	2–2	5.49+07
9763.450	41131–51370	1–2	7.58+07
2537.460	11976–51374	4–5	4.76+07
3148.408	19621–51374	5–5	2.46+07
3252.916	20641–51374	4–5	4.09+07
3370.785	21716–51374	5–5	4.28+08
3403.299	21999–51374	4–5	2.53+07
3730.388	24575–51374	4–5	1.36+08
3956.457	26106–51374	6–5	1.59+08
3995.199	26351–51374	5–5	4.20+06
4432.570	28820–51374	5–5	6.66+06
5403.820	32874–51374	4–5	2.25+07
6977.440	37046–51374	4–5	3.54+06
2248.858	6928–51381	5–4	6.61+07
2271.781	7377–51381	4–4	9.15+07
4038.622	26628–51381	4–4	6.64+06
3144.924	19621–51409	5–4	3.72+06
3161.558	19788–51409	4–4	5.97+06
3249.191	20641–51409	4–4	2.90+07
3366.789	21716–51409	5–4	1.45+08
3399.230	21999–51409	4–4	4.60+07
3663.250	24119–51409	4–4	2.56+07
3693.008	24339–51409	3–4	4.48+07
3725.498	24575–51409	4–4	2.11+07
3969.628	26225–51409	3–4	3.38+07
4425.660	28820–51409	5–4	2.16+06
4536.510	29372–51409	3–4	7.99+05
2571.570	12561–51436	3–3	3.06+06
2598.855	12969–51436	2–3	1.14+07
2950.240	17550–51436	3–3	8.26+07
3168.858	19913–51461	2–3	6.55+07
3512.239	22997–51461	4–3	4.54+07
3526.377	23111–51461	3–3	5.05+08
3536.556	23193–51461	2–3	1.07+09
3664.694	24181–51461	3–3	3.89+07
3979.630	26340–51461	2–3	7.55+06
4154.110	27395–51461	3–3	1.59+07
4182.770	27560–51461	2–3	1.27+07
3153.200	19757–51462	3–4	1.13+08
3512.080	22997–51462	4–4	1.04+07
3526.230	23111–51462	3–4	4.02+08
3664.537	24181–51462	3–4	6.47+07
3911.005	25900–51462	4–4	8.40+06
3948.105	26140–51462	3–4	7.52+07
4114.957	27167–51462	4–4	8.32+06
4153.910	27395–51462	3–4	1.32+08
4461.990	29056–51462	3–4	1.90+07
8699.430	39970–51462	3–4	2.09+07
9414.140	40842–51462	3–4	3.64+07
3171.663	20020–51540	1–2	4.96+07
3516.550	23111–51540	3–2	9.47+07
3526.673	23193–51540	2–2	6.36+08
3533.201	23245–51540	1–2	8.96+08
4168.950	27560–51540	2–2	1.44+07
4187.590	27666–51540	1–2	4.62+07
3523.300	23193–51567	2–1	1.07+08
3529.818	23245–51567	1–1	6.86+08
3533.008	23270–51567	0–1	8.42+08
3984.930	26479–51567	1–1	6.47+06
3123.353	19562–51570	4–3	1.88+07
3142.453	19757–51570	3–3	9.54+07
3157.880	19913–51570	2–3	1.60+08
3522.896	23193–51570	2–3	1.95+07
3588.516	23711–51570	4–3	5.68+07
3650.031	24181–51570	3–3	3.31+08
3694.005	24507–51570	2–3	1.29+09
3962.353	26340–51570	2–3	9.29+06
4163.680	27560–51570	2–3	4.12+06
4440.480	29056–51570	3–3	4.78+06
4523.400	29469–51570	2–3	4.30+06
3154.505	19913–51604	2–3	8.09+07
3518.680	23193–51604	2–3	4.01+07
3926.001	26140–51604	3–3	3.37+07
3957.027	26340–51604	2–3	6.94+07
4090.984	27167–51604	4–3	7.45+06
4129.474	27395–51604	3–3	4.95+06
4157.790	27560–51604	2–3	1.20+08
4433.790	29056–51604	3–3	1.87+07
6738.020	36767–51604	3–3	3.54+06
8592.970	39970–51604	3–3	1.37+07
8790.620	40231–51604	2–3	2.23+07
9080.480	40594–51604	4–3	2.51+07
9443.980	41018–51604	2–3	3.94+07
2277.672	7728–51619	3–3	6.95+07
2934.370	17550–51619	3–3	6.79+06
2949.688	17727–51619	2–3	4.65+06
2277.098	7728–51630	3–2	9.75+07
2290.546	7986–51630	2–2	1.67+08
2948.733	17727–51630	2–2	2.31+07
2966.260	17927–51630	1–2	3.08+07
3963.438	26406–51630	1–2	3.96+06
5487.750	33413–51630	3–2	4.12+07
3100.838	19390–51630	6–5	3.87+07
3341.906	21716–51630	5–5	5.41+07
3373.874	21999–51630	4–5	1.11+07
3590.086	23784–51630	5–5	2.00+07
3633.833	24119–51630	4–5	3.17+07
3916.733	26106–51630	6–5	8.82+07
4382.770	28820–51630	5–5	3.22+07
5329.990	32874–51630	4–5	1.22+07
2556.304	12561–51668	3–4	6.84+07
3119.496	19621–51668	5–4	1.30+08
3135.863	19788–51668	4–4	1.20+07
3246.482	20875–51668	3–4	4.24+07
3337.666	21716–51668	5–4	7.48+07
3369.549	21999–51668	4–4	3.28+08
3398.220	22249–51668	3–4	1.34+07
3585.193	23784–51668	5–4	5.51+07
3628.806	24119–51668	4–4	7.43+06
3658.025	24339–51668	3–4	2.91+08
3689.897	24575–51668	4–4	1.19+07
3929.208	26225–51668	3–4	2.25+07
3948.778	26351–51668	5–4	1.69+08
3992.395	26628–51668	4–4	1.85+06
4483.780	29372–51668	3–4	2.44+06
5476.300	33413–51668	3–4	1.53+07
6804.270	36976–51668	3–4	2.66+06
6837.000	37046–51668	4–4	4.18+06
2928.105	17550–51692	3–3	1.41+07
3129.178	19757–51705	3–2	3.86+07
3144.488	19913–51705	2–2	1.05+08
3155.134	20020–51705	1–2	1.10+07
3675.694	24507–51705	2–2	8.86+06
3941.283	26340–51705	2–2	3.86+07
3963.108	26479–51705	1–2	8.95+07
4112.350	27395–51705	3–2	1.15+07
4140.441	27560–51705	2–2	1.13+07
4158.800	27666–51705	1–2	7.59+07
4495.970	29469–51705	2–2	1.01+07
8846.820	40405–51705	1–2	3.67+07
9454.240	41131–51705	1–2	3.36+07
2580.561	12969–51708	2–2	3.20+07
3242.268	20875–51708	3–2	5.98+06
3462.808	22838–51708	2–2	7.57+06
3652.256	24336–51708	2–2	2.10+07

TABLE 2. – *Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level* – Continued

Wave length Å	Energy Levels K	*J*-values	A	Wave-length Å	Energy Levels K	*J*-values	A	Wave-length Å	Energy Levels K	*J*-values	A
3711.411	24772–51708	1–2	1.23+08	3448.786	22838–51826	2–3	7.82+06	5652.320	34363–52050	1–2	1.46+07
3951.164	26406–51708	1–2	2.48+08	3636.650	24336–51826	2–3	5.34+07	5711.870	34547–52050	2–2	2.11+07
3985.393	26624–51708	2–2	4.44+07	3966.824	26624–51826	2–3	1.29+08	6713.060	37158–52050	2–2	6.52+06
4137.002	27543–51708	1–2	1.64+08	3967.423	26628–51826	4–3	1.91+08	6715.410	37163–52050	3–2	5.30+06
4327.100	28605–51708	2–2	7.51+07	4305.200	28605–51826	2–3	2.76+06	6828.610	37410–52050	1–2	2.82+07
5464.290	33413–51708	3–2	9.40+06	6716.240	36941–51826	2–3	2.60+06	8275.910	39970–52050	3–2	1.52+07
5856.080	34637–51708	2–2	1.60+07	2266.903	7728–51828	3–2	9.64+07	8919.950	40842–52050	3–2	5.72+07
3957.620	26479–51740	1–2	5.43+06	2280.222	7986–51828	2–2	2.04+08	9062.240	41018–52050	2–2	2.26+07
4106.437	27395–51740	3–2	2.01+07	2289.032	8155–51828	1–2	1.50+08	3109.050	19913–52067	2–2	9.42+06
4542.720	29733–51740	1–2	3.28+06	3966.532	26624–51828	2–2	1.77+07	3855.846	26140–52067	3–2	3.21+07
4896.440	31323–51740	3–2	7.25+06	3635.190	24336–51837	2–1	1.25+08	4051.923	27395–52067	3–2	2.11+07
4985.260	31686–51740	2–2	4.73+07	3116.250	19757–51837	3–3	1.63+07	4079.186	27560–52067	2–2	1.85+07
5014.950	31805–51740	3–2	1.12+08	3657.890	24507–51837	2–3	7.82+07	4423.860	29469–52067	2–2	1.09+07
5048.460	31937–51740	1–2	2.42+07	3854.375	25900–51837	4–3	3.00+07	4476.080	29733–52067	1–2	2.03+08
5099.090	32134–51740	2–2	1.40+07	3890.390	26140–51837	3–3	1.17+07	4905.150	31686–52067	2–2	2.44+06
5483.120	33507–51740	3–2	1.29+07	3920.839	26340–51837	2–3	1.49+07	4933.880	31805–52067	3–2	4.20+06
5573.100	33802–51740	2–2	3.00+07	4052.312	27167–51837	4–3	1.03+07	5386.340	33507–52067	3–2	6.26+06
5618.630	33947–51740	2–2	2.63+07	4090.077	27395–51837	3–3	8.63+06	5538.540	34017–52067	1–2	1.03+07
5741.860	34329–51740	3–2	1.45+07	4117.850	27560–51837	2–3	8.91+06	5635.840	34329–52067	3–2	1.61+07
5753.140	34363–51740	1–2	6.92+07	4388.410	29056–51837	3–3	7.85+07	6533.970	36767–52067	3–2	7.39+06
5814.820	34547–51740	2–2	9.14+06	4469.380	29469–51837	2–3	1.12+08	6705.120	37158–52067	2–2	1.09+07
6858.160	37163–51740	3–2	2.62+07	6633.760	36767–51837	3–3	1.61+07	6820.430	37410–52067	1–2	1.45+07
6976.310	37410–51740	1–2	6.80+06	6810.280	37158–51837	2–3	1.24+07	8571.810	40405–52067	1–2	9.62+06
7370.160	38175–51740	3–2	7.16+06	8186.800	39626–51837	4–3	1.21+07	3063.933	19552–52181	1–1	1.64+08
7653.780	38678–51740	2–2	2.05+07	2939.072	17927–51942	1–0	1.97+08	3419.706	22947–52181	1–1	9.12+07
9173.460	40842–51740	3–2	3.05+07	2976.126	18378–51969	2–3	9.55+07	3432.023	23052–52181	0–1	2.38+07
3500.164	23193–51755	2–1	9.65+06	3191.116	20641–51969	4–3	2.75+07	3690.450	25092–52181	0–1	1.30+08
3509.736	23270–51755	0–1	4.49+07	3232.155	21039–51969	2–3	3.08+06	3878.740	26406–52181	1–1	3.72+07
3955.352	26479–51755	1–1	6.73+07	3363.815	22249–51969	3–3	6.51+06	3911.699	26624–52181	2–1	6.97+06
4150.258	27666–51755	1–1	4.04+07	3431.815	22838–51969	2–3	9.04+07	4057.654	27543–52181	1–1	3.03+06
4485.980	29469–51755	2–1	5.36+06	3589.586	24119–51969	4–3	2.50+07	4240.370	28605–52181	2–1	5.05+07
5859.200	34692–51755	1–1	1.65+07	3617.788	24336–51969	2–3	8.72+08	2484.530	11976–52213	4–3	2.96+07
8808.170	40405–51755	1–1	4.50+07	3883.282	26225–51969	3–3	9.31+07	2898.867	17727–52213	2–3	7.72+06
8876.130	40491–51755	0–1	6.11+07	4509.310	29799–51969	4–3	1.58+06	2954.654	18378–52213	2–3	1.03+08
2922.620	17550–51756	3–2	3.23+07	5387.510	33413–51969	3–3	3.59+06	3083.152	19788–52213	4–3	2.01+07
2937.806	17727–51756	2–2	1.06+08	6667.730	36976–51969	3–3	1.12+06	3166.435	20641–52213	4–3	2.52+08
3237.234	20875–51756	3–2	5.50+06	9008.370	40871–51969	3–3	2.23+07	3190.020	20875–52213	3–3	3.35+07
3103.760	19552–51762	1–2	9.94+06	3124.099	20020–52020	1–1	1.86+07	3617.090	24575–52213	4–3	1.97+07
3253.949	21039–51762	2–2	5.84+07	3892.980	26340–52020	2–1	2.68+07	3846.802	26225–52213	3–3	4.00+08
3387.410	22249–51762	3–2	9.15+07	3914.273	26479–52020	1–1	4.10+07	3906.748	26624–52213	2–3	5.35+07
3469.390	22947–51762	1–2	7.96+06	3925.201	26550–52020	0–1	4.08+07	6591.320	37046–52213	4–3	2.16+06
3704.021	24772–51762	1–2	2.53+07	4433.220	29469–52020	2–1	1.27+08	3895.450	26550–52214	0–1	4.67+07
4454.660	29320–51762	1–2	3.92+06	4485.680	29733–52020	1–1	6.83+07	4054.883	27560–52214	2–1	1.06+08
3900.519	26140–51771	3–3	4.82+07	6726.670	37158–52020	2–1	1.92+07	4072.518	27666–52214	1–1	6.46+07
3931.122	26340–51771	2–3	3.36+07	6842.670	37410–52020	1–1	2.68+07	4395.290	29469–52214	2–1	1.53+07
4063.286	27167–51771	4–3	1.09+08	4083.780	27560–52040	2–1	4.34+07	4446.840	29733–52214	1–1	4.83+07
4101.272	27395–51771	3–3	1.95+07	4481.620	29733–52040	1–1	3.44+07	4930.330	31937–52214	1–1	1.80+07
4129.220	27560–51771	2–3	2.16+06	4911.790	31686–52040	2–1	9.27+06	4975.420	32134–52214	2–1	4.04+06
4401.290	29056–51771	3–3	4.25+07	4973.110	31937–52040	1–1	5.32+07	4978.610	32134–52214	2–1	3.85+07
4482.750	29469–51771	2–3	2.30+07	5022.240	32134–52040	2–1	1.02+08	5472.730	33947–52214	2–1	2.71+07
4885.440	31307–51771	4–3	8.47+06	5481.450	33802–52040	2–1	2.35+07	5525.550	34122–52214	0–1	3.51+07
4889.110	31323–51771	3–3	3.37+07	5547.000	34017–52040	1–1	1.00+07	5600.240	34363–52214	1–1	2.84+07
4977.650	31686–51771	2–3	2.25+06	5717.840	34556–52040	0–1	6.68+07	5661.360	34556–52214	0–1	1.88+07
5007.290	31805–51771	3–3	2.93+07	6717.560	37158–52040	2–1	7.16+06	5705.480	34692–52214	1–1	3.37+07
5353.390	33096–51771	4–3	2.81+07	6885.770	37521–52040	2–1	2.84+07	6639.720	37158–52214	2–1	7.34+06
5473.910	33507–51771	3–3	2.94+07	3858.474	26140–52050	3–2	3.68+07	6752.720	37410–52214	1–1	1.87+07
5563.600	33802–51771	2–3	2.54+07	3909.664	26479–52050	1–2	4.41+07	6804.020	37521–52214	2–1	1.60+07
5638.270	34040–51771	4–3	3.11+07	4054.833	27395–52050	3–2	6.64+07	8342.950	40231–52214	2–1	2.38+07
5731.770	34329–51771	3–3	2.34+07	4082.125	27560–52050	2–2	2.33+07	8929.040	41018–52214	2–1	7.39+07
6627.560	36686–51771	4–3	4.10+06	4347.850	29056–52050	3–2	1.21+07	9019.840	41131–52214	1–1	3.46+07
6663.260	36767–51771	3–3	4.25+06	4479.610	29733–52050	1–2	2.07+07	4065.392	27666–52257	1–0	1.48+08
6841.350	37158–51771	2–3	2.66+07	4909.390	31686–52050	2–2	1.09+07	4438.350	29733–52257	1–0	5.56+07
7353.530	38175–51771	3–3	7.99+06	4938.180	31805–52050	3–2	1.70+07	5480.870	34017–52257	1–0	1.05+08
8471.750	39970–51771	3–3	1.10+07	4970.650	31937–52050	1–2	4.74+06	5691.510	34692–52257	1–0	9.99+07
8945.200	40594–51771	4–3	6.20+07	5019.740	32134–52050	2–2	2.44+06	6733.160	37410–52257	1–0	4.01+07
9147.800	40842–51771	3–3	3.33+07	5391.470	33507–52050	3–2	3.84+07	8984.870	41131–52257	1–0	2.25+08
2572.752	12969–51826	2–3	3.08+07	5478.460	33802–52050	2–2	8.73+06	2515.848	12561–52297	3–2	2.41+07
3120.436	19788–51826	4–3	1.48+08	5522.460	33947–52050	2–2	1.13+07	2947.363	18378–52297	2–2	1.06+08
3351.746	21999–51826	4–3	5.60+07	5543.930	34017–52050	1–2	2.40+07	3053.065	19552–52297	1–2	2.65+08
3380.112	22249–51826	3–3	2.89+08	5641.450	34329–52050	3–2	3.13+07	3181.522	20875–52297	3–2	2.13+08

TABLE 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*—Continued

Wave length Å	Energy Levels K	*J*-values	A	Wave-length Å	Energy Levels K	*J*-values	A	Wave-length Å	Energy Levels K	*J*-values	A
3198.266	21039–52297	2–2	1.97+07	3004.119	19621–52899	5–5	3.27+07	5401.270	34844–53353	6–6	3.82+06
3393.623	22838–52297	2–2	9.82+06	3019.290	19788–52899	4–5	6.91+07	2450.439	12561–53358	3–3	4.35+07
3575.374	24336–52297	2–2	4.23+08	3235.312	21999–52899	4–5	1.20+06	2857.996	18378–53358	2–3	7.49+07
3632.042	24772–52297	1–2	9.40+08	3529.531	24575–52899	4–5	2.06+07	2978.060	19788–53358	4–3	8.29+06
3894.005	26624–52297	2–2	9.17+07	3765.700	26351–52899	5–5	2.28+07	3188.026	21999–53358	4–3	4.16+07
4360.810	29372–52297	3–2	6.23+06	3805.345	26628–52899	4–5	6.74+08	3473.303	24575–53358	4–3	7.33+07
5293.960	33413–52297	3–2	9.90+06	2840.938	17727–52916	2–2	2.27+07	4167.960	29372–53358	3–3	9.70+06
3025.638	19390–52431	6–6	5.82+08	2894.506	18378–52916	2–2	6.16+08	4243.560	29799–53358	4–3	6.33+06
3046.930	19621–52431	5–6	2.08+07	2996.386	19552–52916	1–2	1.95+08	2789.477	17550–53389	3–3	1.02+08
3254.734	21716–52431	5–6	7.44+06	3323.738	22838–52916	2–2	4.17+08	3668.214	26140–53394	3–4	4.18+07
3489.670	23784–52431	5–6	1.05+08	3335.770	22947–52916	1–2	1.47+08	4526.410	31307–53394	4–4	4.55+06
3797.517	26106–52431	6–6	3.22+08	3552.112	24772–52916	1–2	1.18+08	4529.560	31323–53394	3–4	1.41+07
3033.101	19552–52512	1–1	8.22+07	3802.283	26624–52916	2–2	5.53+07	4925.290	33096–53394	4–4	1.76+06
3078.436	20038–52512	0–1	4.39+08	4243.370	29357–52916	2–2	2.18+07	5027.140	33507–53394	3–4	3.78+07
3176.366	21039–52512	2–1	1.46+08	4246.090	29372–52916	3–2	4.98+07	5165.420	34040–53394	4–4	5.94+07
3368.983	22838–52512	2–1	7.65+06	2439.630	11976–52954	4–3	3.93+07	5243.790	34329–53394	3–4	1.91+07
3381.340	22947–52512	1–1	7.77+07	3740.247	26225–52954	3–3	1.92+08	5512.280	35257–53394	4–4	7.37+06
3393.382	23052–52512	0–1	7.37+07	4239.370	29372–52954	3–3	8.60+06	5983.700	36686–53394	4–4	3.13+07
3548.037	24336–52512	2–1	1.51+08	8274.280	40871–52954	3–3	1.39+07	6569.230	38175–53394	3–4	3.76+07
3603.828	24772–52512	1–1	2.99+08	3680.675	25900–53061	4–5	1.31+08	7447.430	39970–53394	3–4	1.43+07
3645.822	25092–52512	0–1	1.04+09	3817.650	26875–53061	5–5	3.69+07	2941.770	19562–53546	4–3	3.33+07
3829.458	26406–52512	1–1	1.05+08	5162.290	33695–53061	5–5	1.30+08	3616.162	25900–53546	4–3	3.83+07
3861.600	26624–52512	2–1	4.96+07	5653.890	35379–53061	5–5	8.23+06	3789.808	27167–53546	4–3	3.41+07
4003.764	27543–52512	1–1	6.82+07	7440.980	39626–53061	4–5	1.85+07	4888.650	33096–53546	4–3	1.83+07
4181.550	28605–52512	2–1	3.60+07	7807.920	40257–53061	5–5	1.36+07	4988.960	33507–53546	3–3	2.98+07
5332.680	33765–52512	2–1	4.02+07	2986.653	19621–53094	5–6	1.35+07	5125.130	34040–53546	4–3	1.32+08
3018.134	19390–52514	6–6	1.39+07	3738.308	26351–53094	5–6	4.41+08	5466.400	35257–53546	4–3	3.05+07
3039.322	19621–52514	5–6	1.57+07	4118.548	28820–53094	5–6	4.37+08	5929.700	36686–53546	4–3	1.53+07
3479.683	23784–52514	5–6	6.44+06	4203.950	29313–53094	6–6	5.40+07	7181.930	39626–53546	4–3	1.69+07
3785.706	26106–52514	6–6	1.50+07	3804.013	26875–53155	5–4	2.97+07	7363.960	39970–53546	3–3	1.27+07
3821.181	26351–52514	5–6	4.34+08	4983.860	33096–53155	.4–4	7.22+07	7719.050	40594–53546	4–3	1.46+07
4219.360	28820–52514	5–6	2.96+08	5137.390	33695–53155	5–4	8.55+07	3644.798	26140–53569	3–2	7.84+07
4309.040	29313–52514	6–6	2.77+07	5441.320	34782–53155	5–4	4.29+06	3671.510	26340–53569	2–2	2.08+07
3009.094	19390–52613	6–5	9.64+07	5624.060	35379–53155	5–4	1.88+07	3819.497	27395–53569	3–2	6.66+07
3030.149	19621–52613	5–5	7.38+08	7751.180	40257–53155	5–4	1.72+07	4568.610	31686–53569	2–2	1.69+06
3045.594	19788–52613	4–5	2.21+07	3846.001	27167–53161	4–3	1.56+07	4593.540	31805–53569	3–2	6.21+06
3235.592	21716–52613	5–5	5.64+06	4982.510	33096–53161	4–3	9.73+07	4983.260	33507–53569	3–2	9.38+07
3771.473	26106–52613	6–5	7.38+06	5228.390	34040–53161	4–3	4.53+07	5196.100	34329–53569	3–2	1.11+08
3806.699	26351–52613	5–5	3.16+08	7386.390	39626–53161	4–3	5.09+07	6093.660	37163–53569	3–2	1.34+07
3005.302	19390–52655	6–7	4.40+07	3801.975	26875–53169	5--6	2.32+07	6494.510	38175–53569	3–2	1.92+07
3765.541	26106–52655	6–7	6.41+08	5133.690	33695–53169	5–6	1.53+08	6713.760	38678–53569	2–2	7.14+06
3159.248	21039–52683	2–2	8.48+06	5455.430	34844–53169	6–6	5.26+07	7351.560	39970–53569	3–2	4.02+07
3349.739	22838–52683	2–2	4.55+06	5619.600	35379–53169	5–6	5.31+06	7855.480	40842–53569	3–2	1.94+07
3361.959	22947–52683	1–2	2.16+07	7742.710	40257–53169	5–6	7.20+06	2772.320	17550–53610	3–4	8.50+07
3581.816	24772–52683	1–2	1.78+08	2868.454	18378–53230	2–1	1.78+08	3650.554	26225–53610	3–4	4.17+07
3778.509	26225–52683	3–2	1.21+08	2968.481	19552–53230	1–1	1.00+08	4124.490	29372–53610	3–4	2.66+06
3836.332	26624–52683	2–2	3.09+08	3011.883	20038–53230	0–1	5.47+07	2768.432	17550–53661	3–3	6.66+07
3976.615	27543–52683	1–2	1.51+08	3289.442	22838–53230	2–1	5.27+07	2782.055	17727–53661	2–3	3.38+07
4151.960	28605–52683	2–2	2.58+07	3301.227	22947–53230	1–1	6.43+07	2833.401	18378–53661	2–3	2.90+07
4285.830	29357–52683	2–2	8.99+06	3459.911	24336–53230	2–1	5.59+08	2951.356	19788–53661	4–3	1.17+07
5187.920	33413–52683	3–2	2.33+07	3512.970	24772–53230	1–1	7.84+07	3437.046	24575–53661	4–3	1.89+08
6364.720	36976–52683	3–2	6.31+06	3757.459	26624–53230	2–1	1.64+08	3697.536	26624–53661	2–3	1.26+08
3015.913	19621–52769	5–4	9.32+07	3891.928	27543–53230	1–1	2.92+08	3989.859	28605–53661	2–3	3.43+07
3031.213	19788–52769	4–4	7.32+08	4059.726	28605–53230	2–1	7.57+07	4189.560	29799–53661	4–3	2.26+07
3111.686	20641–52769	4–4	2.15+07	5376.850	34637–53230	2–1	1.43+08	4809.260	32874–53661	4–3	1.27+06
3249.037	21999–52769	4–4	4.95+06	5424.070	34844–53275	6–7	2.30+08	3151.353	21999–53722	4–5	3.30+08
3275.685	22249–52769	3–4	5.72+06	3507.390	24772–53275	1–2	8.45+07	4014.534	28820–53722	5–5	2.62+08
3545.832	24575–52769	4–4	8.10+07	3751.059	26624–53275	2–2	4.25+07	2945.050	19788–53734	4–3	7.32+07
4174.420	28820–52769	5–4	3.07+06	4952.650	33096–53282	4–5	4.63+06	3235.833	22838–53734	2–3	7.82+06
2861.996	17927–52858	1–1	7.90+06	5195.470	34040–53282	4–5	9.42+07	3375.724	24119–53734	4–3	1.98+06
2899.416	18378–52858	2–1	5.58+08	5404.140	34782–53282	5–5	3.39+08	3400.662	24336–53734	2–3	1.44+07
3342.298	22947–52858	1–1	1.83+08	5546.490	35257–53282	4–5	1.17+07	3401.007	24339–53734	3–3	7.94+06
3354.064	23052–52858	0–1	1.74+08	5708.110	35768–53282	4–5	1.08+07	3688.198	26628–53734	4–3	1.29+07
3505.065	24336–52858	2–1	3.17+08	6024.070	36686–53282	4–5	8.82+07	3590.990	25900–53739	4–5	1.93+07
3559.506	24772–52858	1–1	4.99+08	2794.157	17550–53329	3–4	8.57+06	3721.278	26875–53739	5–5	1.06+08
3779.444	26406–52858	1–1	1.43+08	2965.811	19621–53329	5–4	5.14+07	3762.205	27167–53739	4–5	1.76+07
3810.759	26624–52858	2–1	1.95+08	3422.499	24119–53329	4–4	1.81+08	4842.790	33096–53739	4–5	2.86+06
3949.156	27543–52858	1–1	3.61+07	3688.476	26225–53329	3–4	5.15+07	5074.760	34040–53739	4–5	8.24+07
4253.910	29357–52858	2–1	1.24+07	4172.980	29372–53329	3–4	6.68+06	5409.120	35257–53739	4–5	1.00+07
5236.200	33765–52858	2–1	3.26+07	5383.370	34782–53353	5–6	2.60+08	5445.040	35379–53739	5–5	9.66+07

TABLE 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*—Continued

Wave length Å	Energy Levels K	J-values	A	Wave-length Å	Energy Levels K	J-values	A	Wave-length Å	Energy Levels K	J-values	A
5562.710	35768–53739	4–5	1.76+07	5487.140	35612–53831	3–3	7.43+06	5914.100	37163–54067	3–4	6.08+07
5862.360	36686–53739	4–5	5.38+07	5997.800	37163–53831	3–3	1.71+07	3381.990	24507–54067	2–2	9.01+06
7083.400	39626–53739	4–5	1.02+07	6597.610	38678–53831	2–3	1.15+07	4395.510	31323–54067	3–2	1.57+07
7605.320	40594–53739	4–5	9.88+06	7212.470	39970–53831	3–3	2.21+07	4466.940	31686–54067	2–2	2.31+07
9233.180	42912–53739	5–5	1.22+07	7351.160	40231–53831	2–3	1.50+07	4490.770	31805–54067	3–2	4.35+07
3418.905	24507–53748	2–3	1.89+07	4962.560	33695–53841	5–6	6.31+06	4862.550	33507–54067	3–2	5.00+06
3761.069	27167–53748	4–3	5.41+06	5415.200	35379–53841	5–6	2.78+08	4933.190	33802–54067	2–2	5.98+06
4455.030	31307–53748	4–3	2.22+07	5369.960	35257–53874	4–5	2.49+08	4986.220	34017–54067	1–2	1.09+07
4458.100	31323–53748	3–3	2.27+07	5405.360	35379–53874	5–5	2.96+07	5121.640	34547–54067	2–2	5.95+07
4939.240	33507–53748	3–3	2.17+07	5816.360	36686–53874	4–5	3.29+07	5417.040	35612–54067	3–2	1.28+07
5072.690	34040–53748	4–3	1.92+07	3107.978	21716–53882	5–4	2.95+07	5914.190	37163–54067	3–2	1.35+08
5148.230	34329–53748	3–3	8.72+07	3135.590	21999–53882	4–4	1.87+07	6290.970	38175–54067	3–2	4.32+07
5560.230	35768–53748	4–3	1.97+07	3614.711	26225–53882	3–4	8.48+07	6496.460	38678–54067	2–2	5.99+07
5859.610	36686–53748	4–3	6.14+07	3989.006	28820–53882	5–4	7.29+06	6633.440	38996–54067	1–2	8.90+06
6419.980	38175–53748	3–3	8.30+07	2750.872	17550–53892	3–3	3.76+08	7091.830	39970–54067	3–2	1.96+07
6634.120	38678–53748	2–3	6.17+06	2764.323	17727–53892	2–3	2.52+08	2734.269	17550–54112	3–2	4.49+08
7256.140	39970–53748	3–3	8.56+06	2815.017	18378–53892	2–3	1.80+07	2747.556	17727–54112	2–2	2.50+08
2451.384	12969–53749	2–2	4.18+07	2931.420	19788–53892	4–3	1.62+07	2762.773	17927–54112	1–2	1.88+08
2790.762	17927–53749	1–2	9.09+06	3006.598	20641–53892	4–3	1.37+07	2892.479	19562–54125	4–4	4.46+07
3056.250	21039–53749	2–2	5.49+07	3159.437	22249–53892	3–3	8.22+06	2908.864	19757–54125	3–4	5.06+07
3656.227	26406–53749	1–2	1.46+08	3410.031	24575–53892	4–3	4.56+07	3196.147	22846–54125	5–4	2.36+08
3814.785	27543–53749	1–2	6.56+07	3613.459	26225–53892	3–3	1.14+08	3287.117	23711–54125	4–4	3.97+07
4092.287	29320–53749	1–2	2.93+07	3953.512	28605–53892	2–3	4.17+06	3338.638	24181–54125	3–4	4.52+07
2774.150	17727–53763	2–3	7.92+06	3624.056	26340–53925	2–1	8.25+07	3740.061	27395–54125	3–4	3.21+07
3172.292	22249–53763	3–3	1.03+07	3791.730	27560–53925	2–1	4.14+07	2930.590	20020–54132	1–1	6.25+06
3372.352	24119–53763	4–3	3.16+06	4087.801	29469–53925	2–1	5.27+06	4917.240	33802–54132	2–1	3.13+07
3397.221	24336–53763	2–3	2.47+07	4587.730	32134–53925	2–1	5.26+06	4969.930	34017–54132	1–1	5.85+07
3397.560	24339–53763	3–3	2.10+07	4967.900	33802–53925	2–1	5.52+07	6604.670	38996–54132	1–1	7.94+06
3425.009	24575–53763	4–3	4.32+08	5004.030	33947–53925	2–1	2.17+07	7191.660	40231–54132	2–1	4.85+07
3973.655	28605–53763	2–3	6.26+07	5159.070	34547–53925	2–1	9.76+07	7282.390	40405–54132	1–1	3.76+07
4096.114	29357–53763	2–3	2.29+07	5197.940	34692–53925	1–1	3.26+07	3567.748	26140–54161	3–3	2.18+07
4171.700	29799–53763	4–3	4.41+07	6556.790	38678–53925	2–1	7.78+06	3593.329	26340–54161	2–3	6.50+07
4999.110	33765–53763	2–3	6.27+06	6696.320	38996–53925	1–1	5.66+06	4840.320	33507–54161	3–3	9.64+06
4450.760	31307–53769	4–4	2.63+06	7300.470	40231–53925	2–1	2.68+07	4910.330	33802–54161	2–3	2.15+07
4551.670	31805–53769	3–4	3.63+06	3592.680	26140–53967	3–2	8.41+07	4945.630	33947–54161	2–3	5.44+06
4835.860	33096–53769	4–4	5.34+06	4886.340	33507–53967	3–2	3.96+07	5040.900	34329–54161	3–3	1.17+08
4934.020	33507–53769	3–4	1.78+07	4993.690	33947–53967	2–2	9.93+06	5097.000	34547–54161	2–3	8.69+07
5067.160	34040–53769	4–4	1.89+07	5090.790	34329–53967	3–2	8.55+07	5389.480	35612–54161	3–3	7.96+07
5142.540	34329–53769	3–4	7.48+07	5148.060	34547–53967	2–2	7.12+07	5461.550	35856–54161	2–3	7.40+06
5400.510	35257–53769	4–4	9.58+07	6079.020	37521–53967	2–2	2.39+07	6007.960	37521–54161	2–3	3.68+07
5505.890	35612–53769	3–4	1.11+07	6330.860	38175–53967	3–2	1.63+07	7176.890	40231–54161	2–3	2.96+07
5553.590	35768–53769	4–4	1.11+07	7142.520	39970–53967	3–2	3.61+07	7506.030	40842–54161	3–3	1.42+07
5852.190	36686–53769	4–4	1.59+07	2889.890	19390–53983	6–5	1.92+07	5021.610	34329–54237	3–4	1.09+07
6020.170	37163–53769	3–4	6.12+07	2909.313	19621–53983	5–5	5.98+06	5367.470	35612–54237	3–4	2.52+08
7244.860	39970–53769	3–4	1.85+07	3098.192	21716–53983	5–5	1.92+08	5855.130	37163–54237	3–4	1.50+07
2772.511	17727–53785	2–3	9.35+07	3310.347	23784–53983	5–5	7.85+07	2887.961	19621–54237	5–4	1.41+07
3395.080	24339–53785	3–3	3.35+06	3347.507	24119–53983	4–5	3.59+06	2975.655	20641–54237	4–4	5.17+07
3681.227	26628–53785	4–3	5.43+07	3586.114	26106–53983	6–5	1.16+09	3073.982	21716–54237	5–4	5.69+07
2901.910	19351–53801	5–5	1.19+08	4735.850	32874–53983	4–5	2.42+07	3101.004	21999–54237	4–4	2.22+07
2919.838	19562–53801	4–5	3.55+07	5902.530	37046–53983	4–5	6.64+06	3282.720	23784–54237	5–4	6.73+06
3229.595	22846–53801	5–5	3.11+07	2806.072	18378–54005	2–3	2.38+07	3319.258	24119–54237	4–4	6.28+07
3322.474	23711–53801	4–5	7.05+07	3123.545	21999–54005	4–3	1.24+07	3343.678	24339–54237	3–4	2.41+07
2770.695	17727–53808	2–1	1.10+08	3148.178	22249–54005	3–3	1.22+07	3568.828	26225–54237	3–4	1.16+08
2786.180	17927–53808	1–1	3.68+07	3207.649	22838–54005	2–3	5.89+06	3584.960	26351–54237	5–4	8.94+08
2821.630	18378–53808	2–1	1.06+07	3598.721	26225–54005	3–3	4.47+07	4020.490	29372–54237	3–4	8.74+06
2918.354	19552–53808	1–1	2.02+08	4055.980	29357–54005	2–3	2.61+06	4800.650	33413–54237	3–4	1.77+07
2960.299	20038–53808	0–1	2.36+08	4854.890	33413–54005	3–3	1.70+06	3598.930	26479–54258	1–2	2.16+07
3228.003	22838–53808	2–1	6.73+08	2887.360	19390–54014	6–5	3.43+06	3759.597	27666–54258	1–2	1.25+06
3250.394	23052–53808	0–1	9.60+07	3095.270	21716–54014	5–5	3.13+07	4452.620	31805–54258	3–2	3.55+06
3392.014	24336–53808	2–1	2.92+08	3307.008	23784–54014	5–5	1.85+07	4887.190	33802–54258	2–2	1.51+07
3442.979	24772–53808	1–1	1.21+08	3582.201	26106–54014	6–5	4.99+08	5072.080	34547–54258	2–2	4.97+07
3806.203	27543–53808	1–1	2.37+08	4729.030	32874–54014	4–5	1.09+07	5109.650	34692–54258	1–2	4.47+07
4082.432	29320–53808	1–1	3.84+07	3579.829	26140–54067	3–4	2.40+07	5686.530	36686–54267	4–5	5.08+07
4088.567	29357–53808	2–1	5.16+07	4392.580	31307–54067	4–4	8.96+06	2750.708	17927–54271	1–1	2.96+08
3636.496	26340–53831	2–3	4.77+07	5065.020	34329–54067	3–4	9.52+07	2879.461	19552–54271	1–1	2.46+07
4538.840	31805–53831	3–3	6.40+06	5315.080	35257–54067	4–4	7.88+06	2920.290	20038–54271	0–1	1.82+07
4991.280	33802–53831	2–3	3.26+07	5349.740	35379–54067	5–4	9.14+06	3339.582	24336–54271	2–1	8.76+07
5027.780	33947–53831	2–3	1.77+07	5463.280	35768–54067	4–4	1.05+08	3388.966	24772–54271	1–1	5.13+07
5126.220	34329–53831	3–3	2.89+07	5557.960	36079–54067	3–4	1.61+07	3615.959	26624–54271	2–1	2.84+07
5184.290	34547–53831	2–3	3.09+07	5752.040	36686–54067	4–4	3.15+07	2897.635	19788–54289	4–3	4.67+07

TABLE 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*—Continued

Wave length Å	Energy Levels K	*J*-values	A	Wave-length Å	Energy Levels K	*J*-values	A	Wave-length Å	Energy Levels K	*J*-values	A
3096.044	21999–54289	4–3	1.74+07	4798.270	33765–54600	2–3	1.60+07	3229.994	24575–55526	4–5	3.35+08
3120.220	22249–54289	3–3	3.20+07	5007.710	34637–54600	2–3	8.86+06	3813.891	29313–55526	6–5	9.12+07
3562.269	26225–54289	3–3	1.41+07	2868.213	19757–54612	3–2	7.22+07	3418.176	26479–55727	1–0	5.05+08
3613.612	26624–54289	2–3	4.05+07	2889.991	20020–54612	1–2	5.91+07	5975.360	38996–55727	1–0	4.25+08
3614.109	26628–54289	4–3	6.42+07	3187.171	23245–54612	1–2	3.44+07	2761.480	19552–55754	1–2	6.79+07
3892.302	28605–54289	2–3	3.57+06	3320.779	24507–54612	2–2	8.54+07	3181.922	24336–55754	2–2	1.81+08
2720.194	17550–54301	3–4	1.98+08	4276.680	31307–54683	4–4	1.70+07	3406.442	26406–55754	1–2	5.49+08
3067.952	21716–54301	5–4	9.58+07	4279.480	31323–54683	3–4	1.42+07	3543.669	27543–55754	1–2	4.84+08
3094.870	21999–54301	4–4	3.83+07	4911.540	34329–54683	3–4	3.56+06	3682.226	28605–55754	2–2	4.28+09
3275.848	23784–54301	5–4	4.21+06	5023.480	34782–54683	5–4	6.05+06	3787.164	29357–55754	2–2	1.37+08
3312.224	24119–54301	4–4	9.01+06	5285.130	35768–54683	4–4	1.25+07	4546.480	33765–55754	2–2	5.61+06
3560.705	26225–54301	3–4	1.29+08	5373.700	36079–54683	3–4	4.50+07	4734.100	34637–55754	2–2	3.11+07
4010.180	29372–54301	3–4	3.88+06	5554.900	36686–54683	4–4	5.68+07	2958.462	21999–55791	4–3	1.28+07
4665.550	32874–54301	4–4	1.81+06	5705.990	37163–54683	3–4	7.26+07	2980.532	22249–55791	3–3	2.77+08
4785.960	33413–54301	3–4	7.00+06	6055.990	38175–54683	3–4	4.78+07	3156.464	24119–55791	4–3	9.17+07
2891.904	19788–54357	4–3	2.92+07	2869.833	19913–54748	2–1	8.32+07	3178.545	24339–55791	3–3	1.28+08
3113.592	22249–54357	3–3	8.55+07	3173.400	23245–54748	1–1	1.49+08	3202.562	24575–55791	4–3	2.40+08
3329.970	24336–54357	2–3	9.41+06	3175.970	23270–54748	0–1	7.12+07	3677.309	28605–55791	2–3	5.13+08
3330.316	24339–54357	3–3	1.79+07	3257.244	24119–54811	4–4	9.51+07	3781.938	29357–55791	2–3	8.42+07
3356.695	24575–54357	4–3	3.14+07	3280.763	24339–54811	3–4	1.13+06	4725.940	34637–55791	2–3	4.28+06
3604.701	26624–54357	2–3	6.83+07	3846.412	28820–54811	5–4	1.75+08	2755.184	19621–55906	5–4	8.53+07
3605.206	26628–54357	4–3	1.93+08	3996.968	29799–54811	4–4	6.92+07	2853.774	20875–55906	3–4	1.41+08
4859.140	33802–54376	2–2	8.18+06	4243.790	31323–54880	3–2	2.08+07	2924.002	21716–55906	5–4	5.00+08
4910.570	34017–54376	1–2	2.65+07	4310.380	31686–54880	2–2	2.11+07	2948.433	21999–55906	4–4	4.49+08
5078.980	34692–54376	1–2	1.33+08	4677.600	33507–54880	3–2	5.95+06	3145.057	24119–55906	4–4	1.37+08
5398.280	35856–54376	2–2	8.54+07	5984.800	38175–54880	3–2	1.32+08	3166.982	24339–55906	3–4	6.76+06
7155.640	40405–54376	1–2	3.44+07	6170.490	38678–54880	2–2	8.01+07	3190.816	24575–55906	4–4	1.79+08
5462.970	36079–54379	3–3	9.66+07	4265.260	31686–55125	2–3	2.61+07	3368.248	26225–55906	3–4	2.49+07
5806.730	37163–54379	3–3	4.00+07	4286.990	31805–55125	3–3	3.41+07	3414.564	26628–55906	4–4	1.88+07
5930.170	37521–54379	2–3	1.33+08	4688.380	33802–55125	2–3	4.32+06	2834.755	20641–55907	4–5	4.06+07
3591.485	26550–54386	0–1	1.17+08	4807.240	34329–55125	3–3	2.16+06	2923.851	21716–55907	5–5	3.91+08
3741.486	27666–54386	1–1	3.18+07	5164.560	35768–55125	4–3	5.26+07	3112.079	23784–55907	5–5	2.56+08
4492.690	32134–54386	2–1	3.66+07	5249.100	36079–55125	3–3	2.12+07	3190.651	24575–55907	4–5	1.25+08
4908.060	34017 54386	1–1	1.04+07	5565.710	37163–55125	3–3	1.09+08	3690.730	28820–55907	5–5	4.57+08
4933.350	34122–54386	0–1	7.12+07	5679.020	37521–55125	2–3	7.22+07	3759.155	29313–55907	6–5	5.42+07
5076.290	34692–54386	1–1	8.08+07	6078.500	38678–55125	2–3	6.76+07	3829.125	29799–55907	4–5	2.62+07
5927.800	37521–54386	2–1	6.35+07	3238.535	24507–55376	2–1	2.48+07	2931.803	21999–56098	4–3	3.91+07
6364.380	38678–54386	2–1	2.64+07	4220.050	31686–55376	2–1	2.54+07	2953.486	22249–56098	3–3	5.83+08
6495.780	38996–54386	1–1	5.54+07	4757.580	34363–55376	1–1	1.05+08	3147.793	24339–56098	3–3	1.32+08
7194.920	40491–54386	0–1	5.06+07	5987.060	38678–55376	2–1	1.55+08	2706.012	19390–56334	6–6	5.40+08
3574.256	26479–54449	1–1	4.43+07	6103.190	38996–55376	1–1	9.42+07	2887.806	21716–56334	5–6	1.14+08
3583.337	26550–54449	0–1	4.95+08	3419.154	26140–55379	3–2	8.43+07	3307.234	26106–56334	6–6	4.15+08
3717.837	17550–54449	3–1	8.37+06	4264.740	31937–55379	1–2	2.01+07	3334.278	26351–56334	5–6	5.26+07
4391.880	31686–54449	2–1	2.03+07	4300.820	32134–55379	2–2	3.69+07	2702.453	19390–56383	6–5	3.24+08
4440.840	31937–54449	1–1	2.23+07	5180.060	36079–55379	3–2	5.69+07	2719.418	19621–56383	5–5	7.33+08
4479.970	32134–54449	2–1	4.58+07	5598.300	37521–55379	2–2	1.61+08	2907.518	21999–56383	4–5	2.67+08
4841.800	33802–54449	2–1	6.97+06	6102.180	38996–55379	1–2	1.05+08	3301.917	26106–56383	6–5	6.55+07
4892.870	34017–54449	1–1	3.42+07	2773.907	19390–55430	6–5	8.49+06	3328.867	26351–56383	5–5	6.91+08
4918.020	34122–54449	0–1	3.02+07	2791.787	19621–55430	5–5	2.01+08	3359.814	26628–56383	4–5	7.79+07
5023.230	34547–54449	2–1	2.25+07	2873.655	20641–55430	4–5	2.94+07	3627.060	28820–56383	5–5	5.07+07
5905.670	37521–54449	2–1	1.15+08	2990.393	21999–55430	4–5	5.29+08	2716.410	19621–56423	5–4	6.86+07
6338.900	38678–54449	2–1	5.24+07	3158.990	23784–55430	5–5	2.12+07	2728.819	19788–56423	4–4	6.20+08
6469.210	38996–54449	1–1	7.97+07	3240.013	24575–55430	4–5	7.31+06	2925.359	22249–56423	3–4	2.64+08
7118.100	40405–54449	1–1	3.15+07	3409.218	26106–55430	6–5	5.62+07	3062.872	23784–56423	5–4	2.64+07
5364.870	35856–54491	2–3	2.69+08	3437.952	26351–55430	5–5	1.33+08	3115.862	24339–56423	3–4	8.46+06
5321.110	35768–54555	4–4	2.05+07	3756.939	28820–55430	5–5	3.68+08	3310.496	26225–56423	3–4	1.76+08
5410.910	36079–54555	3–4	2.80+08	2891.705	20875–55446	3–4	1.10+08	3324.372	26351–56423	5–4	5.51+07
5594.670	36686–54555	4–4	2.74+07	2988.942	21999–55446	4–4	1.27+07	3355.229	26628–56423	4–4	7.64+08
5747.960	37163–54555	3–4	1.64+07	3011.482	22249–55446	3–4	7.69+08	3621.718	28820–56423	5–4	2.03+08
2871.730	19788–54600	4–3	5.76+06	3238.313	24575–55446	4–4	5.79+06	2696.284	19351–56428	5–5	8.44+08
2964.196	20875–54600	3–3	1.67+07	3436.045	26351–55446	5–4	2.25+07	2959.682	22650–56428	6–5	2.21+08
3066.483	21999–54600	4–3	1.79+08	3469.012	26628–55446	4–4	2.11+08	2976.922	22846–56428	5–5	2.00+07
3090.209	22249–54600	3–3	6.87+07	2769.298	19390–55490	6–6	3.33+08	6245.840	40422–56428	4–5	1.37+07
3279.739	24119–54600	4–3	3.59+07	2787.120	19621–55490	5–6	1.14+07	2694.536	19351–56452	5–4	4.32+08
3303.574	24339–54600	3–3	5.11+07	2959.993	21716–55490	5–6	7.33+08	2709.989	19562–56452	4–4	1.87+08
3329.532	24575–54600	4–3	5.78+07	3402.256	26106–55490	6–6	4.11+08	2724.344	19757–56452	3–4	1.04+08
3573.400	26624–54600	2–3	1.52+08	3748.492	28820–55490	5–6	2.24+07	2974.780	22846–56452	5–4	3.09+07
3573.896	26628–54600	4–3	8.32+08	2784.346	19621–55526	5–5	4.30+07	3975.842	31307–56452	4–4	2.39+07
3845.692	28605–54600	2–3	3.14+07	2956.860	21716–55526	5–5	3.64+07	2780.700	20641–56593	4–4	1.07+08
3960.284	29357–54600	2–3	3.48+07	3149.492	23784–55526	5–5	5.45+06	2910.930	22249–56593	3–4	3.10+07

TABLE 2.—*Transition Probabilities for 3288 Lines of* Fe I *in Order of Upper Energy Level*—Continued

Wave length Å	Energy Levels K	*J*-values	A
3047.050	23784–56593	5–4	1.55+08
3292.022	26225–56593	3–4	1.06+09
3336.254	26628–56593	4–4	1.39+08
3599.624	28820–56593	5–4	4.43+08
2784.017	20875–56783	3–3	4.84+07
3060.545	24119–56783	4–3	1.42+08
3081.278	24339–56783	3–3	1.61+07
3271.487	26225–56783	3–3	1.30+08
3314.742	26624–56783	2–3	1.56+09
3315.164	26628–56783	4–3	1.53+06
2681.586	19562–56843	4–4	3.83+08
2695.662	19757–56843	3–4	4.56+08
2940.586	22846–56843	5–4	1.21+08
2963.710	23111–56843	3–4	1.73+07
4631.500	35257–56843	4–4	5.12+06
2567.860	17927–56859	1–2	1.37+08
3074.157	24339–56859	3–2	1.63+08
3115.656	24772–56859	1–2	3.24+07
3282.891	26406–56859	1–2	6.09+08
3306.490	26624–56859	2–2	2.62+08
3410.171	27543–56859	1–2	9.37+08
3538.310	28605–56859	2–2	1.29+08
3253.610	26225–56951	3–4	3.43+08
3296.806	26628–56951	4–4	1.79+07
3553.741	28820–56951	5–4	1.90+09
3681.880	29799–56951	4–4	1.09+08
6089.570	40534–56951	3–4	3.72+07
2656.145	19390–57028	6–7	4.13+08
3233.053	26106–57028	6–7	1.14+09
2669.492	19621–57070	5–6	2.68+08
3254.363	26351–57070	5–6	1.14+09
3538.790	28820–57070	5–6	1.96+07
3073.244	24575–57104	4–5	1.63+07
3280.261	26628–57104	4–5	1.27+09
3534.530	28820–57104	5–5	8.50+07
2708.570	20641–57550	4–4	1.25+09
2725.805	20875–57550	3–4	1.56+08
2789.803	21716–57550	5–4	4.19+08
2812.042	21999–57550	4–4	5.43+07
2960.666	23784–57550	5–4	8.13+07
2509.390	17727–57565	2–3	2.06+07
2707.451	20641–57565	4–3	2.13+08
2810.834	21999–57565	4–3	3.06+07
2878.762	22838–57565	2–3	1.40+08
2504.635	17727–57641	2–3	6.20+06
2701.908	20641–57641	4–3	1.17+08
2731.281	21039–57641	2–3	2.56+08
2804.865	21999–57641	4–3	2.06+08
2824.700	22249–57641	3–3	5.60+07
2982.234	24119–57641	4–3	4.69+07
3001.663	24336–57641	2–3	6.24+07
3223.480	26628–57641	4–3	4.11+07
3143.990	25900–57698	4–4	6.78+08
3167.907	26140–57698	3–4	4.21+08
3243.406	26875–57698	5–4	2.85+08
3274.453	27167–57698	4–4	2.43+08
3299.077	27395–57698	3–4	3.46+07
4225.720	34040–57698	4–4	3.27+07
4776.340	36767–57698	3–4	1.37+07
2714.062	20875–57709	3–2	3.85+08
2726.237	21039–57709	2–2	1.35+09
2819.286	22249–57709	3–2	4.39+08
2995.838	24339–57709	3–2	3.16+07
3314.070	27543–57709	1–2	4.92+07
3132.514	25900–57814	4–3	4.11+08
3156.275	26140–57814	3–3	7.37+08
3262.009	27167–57814	4–3	2.81+08
3286.444	27395–57814	3–3	1.92+08
3304.346	27560–57814	2–3	1.44+07
4188.730	33947–57814	2–3	1.26+08
4256.790	34329–57814	3–3	1.31+07
4749.930	36767–57814	3–3	2.41+07
2593.510	19351–57897	5–5	3.09+08
2836.315	22650–57897	6–5	5.51+07
3140.391	26140–57974	3–2	6.96+08
3160.200	26340–57974	2–2	5.46+08
3174.222	26479–57974	1–2	2.10+07
3269.235	27395–57974	3–2	2.23+08
3298.537	27666–57974	1–2	2.75+07
3457.090	29056–57974	3–2	2.75+08
3507.139	29469–57974	2–2	1.76+08
4085.980	33507–57974	3–2	6.08+07
4714.070	36767–57974	3–2	3.46+07
3211.683	26875–58002	5–6	1.78+09
4112.972	33695–58002	5–6	1.11+08
5633.970	40257–58002	5–6	1.18+08
3116.984	26140–58213	3–2	3.72+07
3150.304	26479–58213	1–2	4.80+08
3261.332	27560–58213	2–2	3.25+08
3272.710	27666–58213	1–2	9.52+07
3428.746	29056–58213	3–2	3.87+08
4095.274	33802–58213	2–2	2.01+07
4661.540	36767–58213	3–2	6.78+07
3184.112	26875–58272	5–5	5.44+07
3707.578	31307–58272	4–5	2.91+08
4125.622	34040–58272	4–5	1.00+08
5655.510	40594–58272	4–5	1.11+08
3087.420	26140–58520	3–4	1.27+08
3742.151	31805–58520	3–4	7.86+07
3996.779	33507–58520	3–4	5.73+07
4132.540	34329–58520	3–4	7.07+07
5655.180	40842–58520	3–4	1.28+08
4137.417	34547–58710	2–3	4.03+07
5650.720	41018–58710	2–3	7.32+07
3197.521	27560–58825	2–2	2.60+08
4117.870	34547–58825	2–2	5.32+07
5650.010	41131–58825	1–2	1.63+08
2544.706	20641–59927	4–5	2.74+09
2528.910	20641–60172	4–4	4.72+08
2543.920	20875–60172	3–4	6.90+09
2772.860	24119–60172	4–4	2.42+08
2531.510	20875–60365	3–3	7.10+08
2542.101	21039–60365	2–3	9.95+09
2439.743	19390–60366	6–6	3.27+09
2453.568	19621–60366	5–6	2.57+08
2586.557	21716–60366	5–6	1.30+08
2918.023	26106–60366	6–6	2.09+09
2442.567	19621–60549	5–5	3.27+09
2505.004	20641–60549	4–5	2.20+08
2923.288	26351–60549	5–5	1.65+09
2947.116	26628–60549	4–5	9.58+08
2504.101	20641–60564	4–3	7.60+07
2518.824	20875–60564	3–3	3.85+08
2592.285	21999–60564	4–3	2.63+08
2609.220	22249–60564	3–3	3.12+08
2945.870	26628–60564	4–3	3.54+07
2440.106	19788–60758	4–4	2.71+09
2491.983	20641–60758	4–4	9.44+08
2506.569	20875–60758	3–4	5.62+08
2905.570	26351–60758	5–4	2.20+08
2929.118	26628–60758	4–4	1.06+09
2488.942	20641–60807	4–3	1.48+09
2503.491	20875–60807	3–3	9.02+08
2741.100	24336–60807	2–3	6.26+08
2890.868	26225–60807	3–3	9.12+07
2554.518	22947–62081	1–2	2.71+08
2648.548	24336–62081	2–2	4.19+08
2802.285	26406–62081	1–2	1.87+08

U.S. GOVERNMENT PRINTING OFFICE : 1968 OL—281-658

NBS TECHNICAL PUBLICATIONS

PERIODICALS

JOURNAL OF RESEARCH reports National Bureau of Standards research and development in physics, mathematics, chemistry, and engineering. Comprehensive scientific papers give complete details of the work, including laboratory data, experimental procedures, and theoretical and mathematical analyses. Illustrated with photographs, drawings, and charts.

Published in three sections, available separately:

• Physics and Chemistry

Papers of interest primarily to scientists working in these fields. This section covers a broad range of physical and chemical research, with major emphasis on standards of physical measurement, fundamental constants, and properties of matter. Issued six times a year. Annual subscription: Domestic, $5.00; foreign, $6.00*.

• Mathematical Sciences

Studies and compilations designed mainly for the mathematician and theoretical physicist. Topics in mathematical statistics, theory of experiment design, numerical analysis, theoretical physics and chemistry, logical design and programming of computers and computer systems. Short numerical tables. Issued quarterly. Annual subscription: Domestic, $2.25; foreign, $2.75*.

• Engineering and Instrumentation

Reporting results of interest chiefly to the engineer and the applied scientist. This section includes many of the new developments in instrumentation resulting from the Bureau's work in physical measurement, data processing, and development of test methods. It will also cover some of the work in acoustics, applied mechanics, building research, and cryogenic engineering. Issued quarterly. Annual subscription: Domestic, $2.75; foreign, $3.50*.

TECHNICAL NEWS BULLETIN

The best single source of information concerning the Bureau's research, developmental, cooperative and publication activities, this monthly publication is designed for the industry-oriented individual whose daily work involves intimate contact with science and technology—*for engineers, chemists, physicists, research managers, product-development managers, and company executives.* Annual subscription: Domestic, $1.50; foreign, $2.25*.

Difference in price is due to extra cost of foreign mailing.

NONPERIODICALS

Applied Mathematics Series. Mathematical tables, manuals, and studies.

Building Science Series. Research results, test methods, and performance criteria of building materials, components, systems, and structures.

Handbooks. Recommended codes of engineering and industrial practice (including safety codes) developed in cooperation with interested industries, professional organizations, and regulatory bodies.

Special Publications. Proceedings of NBS conferences, bibliographies, annual reports, wall charts, pamphlets, etc.

Monographs. Major contributions to the technical literature on various subjects related to the Bureau's scientific and technical activities.

National Standard Reference Data Series. NSRDS provides quantitative data on the physical and chemical properties of materials, compiled from the world's literature and critically evaluated.

Product Standards. Provide requirements for sizes, types, quality and methods for testing various industrial products. These standards are developed cooperatively with interested Government and industry groups and provide the basis for common understanding of product characteristics for both buyers and sellers. Their use is voluntary.

Technical Notes. This series consists of communications and reports (covering both other agency and NBS-sponsored work) of limited or transitory interest.

CLEARINGHOUSE

The Clearinghouse for Federal Scientific and Technical Information, operated by NBS, supplies unclassified information related to Government-generated science and technology in defense, space, atomic energy, and other national programs. For further information on Clearinghouse services, write:

Clearinghouse
U.S. Department of Commerce
Springfield, Virginia 22151

Order NBS publications from:

Superintendent of Documents
Government Printing Office
Washington, D.C. 20402

U.S. DEPARTMENT OF COMMERCE
WASHINGTON, D.C. 20230

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERC